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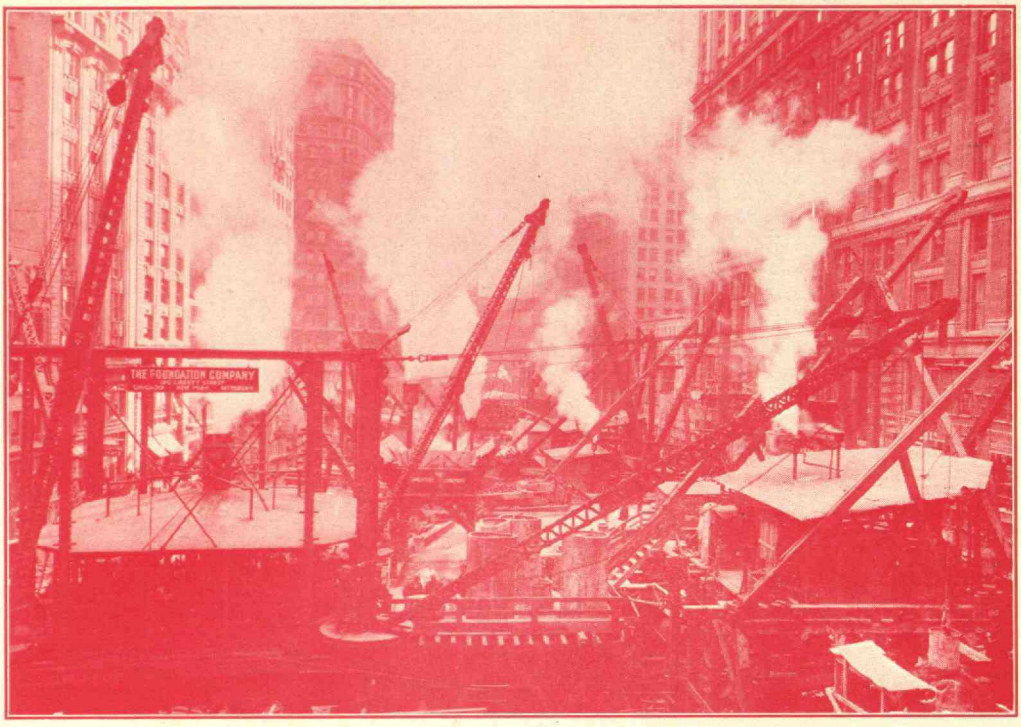

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THE
TECHNOLOGY REVIEW
RELATING TO THE
MASSACHVSETTS·INSTITVTE·OF·TECHNOLOGY

H. E. LOBDELL, EDITOR | E. F. HODGINS, MANAGING EDITOR | R. E. ROGERS, CONTRIBUTING EDITOR

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PUBLISHED BY THE ALUMNI ASSOCIATION
Harry J. Carlson, '92, *President* | Walter Humphreys, '97, *Secretary-Treasurer*

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THE
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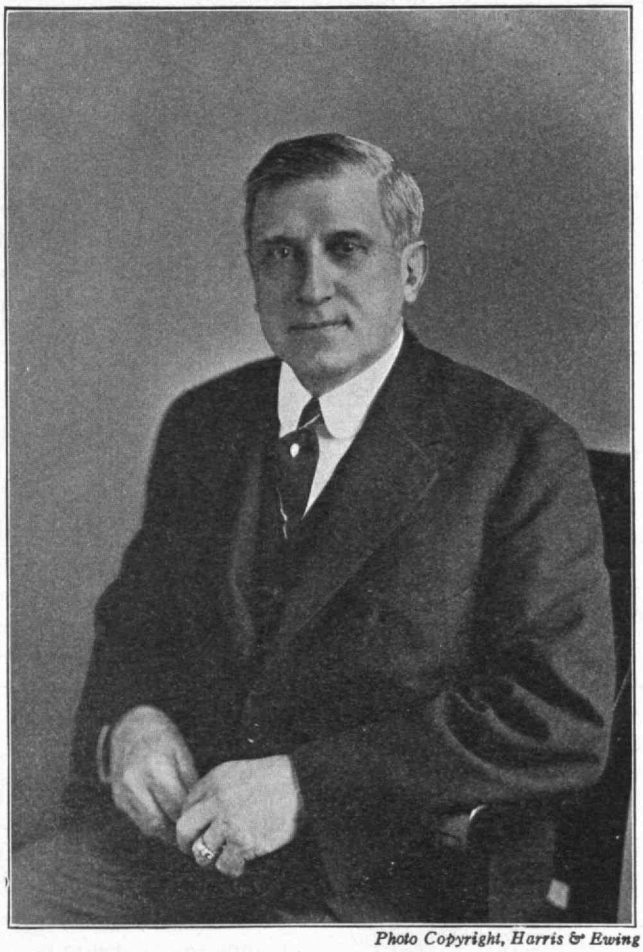
The Past Month

SIGNIFICANT news comes from New York. On December 15 and 16, the New York Technology Club will act as host to the Technology Club Associated and to the Alumni Association at a convention to be held for the purpose of welcoming Dr. Stratton to Technology. Dr. Stratton's first contact with the Faculty has already occurred: this will be his first meeting with the Alumni of the Institution he is to head.

After the reception which opens the convention on Friday at three p.m., the program is a varied one. There will be smokers, inspections of industrial plants, class luncheons. On Saturday evening, there will be a joint dinner of the Technology Clubs Associated, the Alumni Association and the New York Technology Club. Altogether, it seems a wisely planned event and one to look forward to.



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CHARLES M. SCHWAB
Speaker at a Technology Convocation held at Walker Memorial on October 17

ON October 17, Mr. Charles M. Schwab spoke to Technology in Walker Memorial, at the first Convocation held since the address of Dr. Takuma Dan, '78, almost exactly a year ago. It would be futile of the Review to attempt to dissemble the emotion it feels at the coming of Mr. Schwab. It is, in fact, forced to confess that on thought of the occurrence a warm glow of pride suffuses it. There are those who may remember that bigger and better speeches have been a plank in the Review's platform for a long time — for one calendar year, in fact. It was in December, 1921, that the now famous editorial "Foch—and a Moral" appeared in the pages of the Review. This editorial's first anniversary, then, is celebrated in a fitting manner. Mr. Schwab's address was heard by an audience whose size left no room to spare in the auditorium, and upon whose ear the speaker's vigorous phrases fell in a manner that seemed to give much satisfaction. Dean Talbot as chairman of the administrative committee, introduced Mr. Schwab to Technology.

DR. Stratton's first contact with the faculty of the new institution he is to govern, came on the fourth of November. It was on this day that the Corporation and Faculty met their new president, at a reception held at the home of Mr. Everett Morss. This particular Saturday furnished a day full of new contacts for Dr. Stratton. Most of the morning he spent granting interviews to the score of newspaper men who besieged him for

information concerning the new career he is to make for himself. At noon, he attended a luncheon with the Executive Committee of the Corporation. The reception came at four o'clock in the afternoon, at which Dr. Stratton shook some four hundred hands and gazed for the first time into some four hundred pairs of eyes. A private dinner followed in the evening. It is supposed that Dr. Stratton's first meeting with the students will not occur until sometime after his inauguration, for which, as yet, no definite date has been set.

THE coming of a new President has a way of coloring Technology's entire existence these days. Certainly it does much to dispel the depression which has existed in some quarters over the resignation, in the past two years, of so many able men from the Institute staff. But we have a new President and although his coming naturally overshadows everything else, we may still remember that we have some other acquisitions as well. Although a roll call reveals the absence of a number of well-remembered voices, it likewise gives us the opportunity of hearing some that are new this year and likewise of hearing some that have been temporarily silent. Hutchinson comes to us on January 1, to be Professor of Mining; Waterhouse comes to be the new Professor of Metallurgy; Kennelly returns laden with foreign honors, as does Lipka — this latter return making possible the resumption of the famous slide rule lectures, the only lectures whose absence from the curriculum has ever drawn forth editorial protest in *The Tech*. The acquisition, or the return, of these men will certainly do much to lighten the gloom caused by some previous resignations. As a matter of fact, this gloom is almost inevitably postulated by the character of the men whose names are written upon our faculty rolls. We do not have the kind of men it does not hurt to lose.

NOVEMBER saw the first action taken on the continuance of the prize contest which will some day furnish Technology with a new Alma Mater song. The Committee has announced that all entries in this competition are due on the 15th of February.

Unlike most of the Institute's contests, this one is open both to undergraduates and alumni. The purpose of the competition, which extends over a total of four years, is to find a song whose words and music can be used in place of the famous "Stein Song," — not because of any disregard into which the latter has fallen, but because the "Stein Song" is not specific enough in its connection with Technology. The first lap in the competition has already been run. Last year, Arthur E. Hatch, '91, won the $200 prize for the best words and music submitted. A similar prize will be awarded in 1923, 1924 and 1925. At the end of these four years, the new song will be picked from among the four preliminary prize winners.

As usual, complete anonymity is to prevail. Manuscripts are to be submitted under number only, to the Secretary of the Institute Committee. Accompanying the manuscripts, contestants will submit a sealed envelope, bearing upon its face the same number, and enclosing the contestant's name. These envelopes will be opened and read only after the winning song has been determined.

OF late, Technology's Cross Country Team has been making history. Within one week it defeated Jack Moakley's famous runners of Cornell and defeated both Dartmouth and Harvard in a triangular meet. These victories were impressive. The victory from Cornell was narrowly won, by a score of 51 to 55, but when anyone defeats Cornell in a cross-country meet, he has every reason to congratulate himself. There was no uncertainty about the victory over Dartmouth and Harvard, and the showing of the team in this meet evoked the hope that when Captain Hendrie's team journeyed to Princeton, it would return victorious. This hope was not fulfilled, although Hendrie himself placed first. But the Institute, insistent upon sport for the sake of sport and not sport for the sake of winning, has every reason for elation at the splendid showing both of form and of sportsmanship which its Cross Country Team has made so evident this year.

REPORTS of a reasonable finality from the Registrar's Office indicate that for the first term there are 3177 students pursuing the various graduate and undergraduate courses of the Institute.

The analysis of these figures, however, has not been published in all finality. One interesting fact is already in evidence, however, and this is that a dead heat is being run this term between Courses II and XV.

For a number of years now, Course II has held a safe supremacy as the leader in numerical registration. Course XV has been making steady strides to the front ever since its inception and now it has all but arrived at its objective. Figures show that Course II and Course XV have at present a registration each of 486 students. In reality, this balance held true for no more than a day. Students enter, change their registration, or drop out with much frequency during the early weeks of the term, but the parity between the figures is none the less interesting. The Electrical Engineering course follows the deadlocked two with 436 students and Chemical Engineering has 408. From here on, courses distribute themselves indiscriminately. The smallest course this year is Sanitary Engineering, which in all four years claims seven students.

AS the Review goes to press, there comes the news that the first meeting of the Alumni Council will occur this year on November 27. Since the New York Technology club's elsewhere-recorded plan will serve to introduce the Alumni to Dr. Stratton, it is not expected that he will attend the council meeting.

The New Tech Navy

An account of the recent rise to prominence of the Technology crews*

By ALLAN W. ROWE '01

Secretary-Treasurer, Advisory Council on Athletics

One of the oldest of our modern sports, one with an appeal not limited to any race or country, one that can be followed in youth and in age, is the general sport of rowing. In this, however, as in all exercises calling for endurance, strength and judgment, the aspect of competition, ever a potent factor, has become that of dominance in these later days. With the wholesome trend of the time our educational institutions have come to recognize that the conservation and development of various forms of sport are as essential a part of the educational program as those studies more strictly academic in character. With the organizations and the facilities available in most universities and colleges it is perhaps not too much to say that athletics, in the broadest sense, find in them their most important focus. Rowing, however, has failed of receiving the broad recognition accorded to many of the other forms of exercise.

Photograph by Notman Studio

ALLAN WINTER ROWE '01

The competitive element of our American college has grown to undue proportions and sport for the sake of sport has been subordinated to sport for the sake of winning. Rowing is peculiarly susceptible to this untoward influence since, theoretically at least, the development of winning crews is an affair of great financial outlay without any compensatory financial return. While most of our college sports, exclusive of football, probably baseball, and possibly track, operate at some financial loss, the total of the deficit in any of the other activities falls far short of that entailed by college rowing as at present conducted. It is the more regrettable that these disabilities exist, for rowing is a clean, fine and most wholesome form of exercise, free from the possibility of physical injury if conducted moderately, and is one of the games in which men of maturer years may participate with continued pleasure and benefit. If some means, then, could be found to operate college rowing at a not prohibitive expense, the enterprise would seem wholly desirable. In consequence, the "Technology Experiment" is of more than local interest.

In the athletic world the Massachusetts Institute of Technology occupies a somewhat peculiar and individual position. In the first place, it is a professional school, the straitness of whose academic standards is universally recognized. The amount of time which the average student can devote to recreational exercise at Technology falls materially short of that available to the student in the average college. This exact circumscription of time together with the individuality of the scheduling of classes and overcrowded laboratories due to the necessity for economically operating expensive equipment eliminates both football and baseball as potential fields of intercollegiate competition and revenue. A football team which can start its practice only after dusk and must then bring it to an abrupt close in order that the evening work may be accomplished, falls short of a desirable form of exercise for the average man. Similarly, a baseball team which, to round out its season, would have to operate for a full month after academic exercises come to an end, can hardly be regarded as conforming to the best standards of college sport. Recognizing these limitations which, on the one hand, preclude the development of teams which might be sources of definite financial profit to the athletic association and, on the other, make the prosecution of sport a matter of rather more difficulty than is experienced in most institutions, the authorities at Technology see in the latter of these two handicaps the most insistent reason for the prosecution of sports so far as is possible. Men confined to the laboratories and classrooms from nine in the morning until five at night need both the physical stimulus and the mental change of some form of exercise if the balance is to be held true. Further, this is essential for the entire student body rather than for the selected few individuals who through natural or acquired advantages are capable of a high degree of competitive athletic development.

In part, then, determined by existing conditions and equally in part by the recognition of the desirability of complementing mental activity with physical, the whole trend of athletic development at the Institute of Technology has been to interest the student body as a whole, to cultivate general athletics and to conserve

* This article is a revised form of one entitled "The Technology Experiment," which appeared in a recent number of *Intercollegiate Athletics*. It is reprinted here in its altered form by permission of the author.

the competitive element only as a normal stimulus to healthy, right-minded young Americans.

The desirability of rowing as a sport which could conform to these criteria was early recognized by the Advisory Council on Athletics, a body composed of alumni and undergraduates purely advisory in its nature. The extreme limitation, however, imposed upon athletic activities by most rigid circumscription of funds made any general plan an impossibility for the moment, although it has been ever a goal to be striven for conscientiously.

Some fifteen years ago owing to the presence in the student body of several young men who had had rowing experience in other colleges, a modest Alumni subscription was made, a shell purchased and for two or three years more or less successful competitive rowing carried on by a small group of interested athletes supported by a few Alumni. With the graduation of the undergraduate contingent, interest flagged, but in a few years a recrudescence took place which in a comparatively short time invoked the interest of an appreciable number of the student body.

Aided initially by a few interested Alumni, but enduringly (and most helpfully) by the Harvard Athletic Association, the Boston Athletic Association, and yet more recently by the Union Boat Club of Boston, crews of Technology men began to function on the river. Competition of a limited sort was even carried on. It is, perhaps, not too much to say at this point, that the real development of rowing at Technology is in large measure dependent upon the thoroughly sportsmanlike, whole-souled co-operation shown by the above-mentioned athletic bodies. Although at no time was more than one thousand dollars a year available for all of the expenses incident to the crews, and in many years the sum was not more than two-thirds of the above, competitive rowing has been followed out to a steadily increasing extent — some fifteen races during the year 1920–1921 and an even larger number in the year just closed. What is far more important, in the training of squads for these competitive crews, general rowing has been steadily developed.

Recognizing the desirability of the sport as a sport and the grave difficulties with which it was being carried on, the Corporation of the Massachusetts Institute of Technology some months ago most generously purchased the boathouse formerly the property of the Boston Athletic Association and appropriated a sum of money to remodel the house in conformity with the needs of the Technology student body. The Metropolitan Commission with a most friendly spirit of co-operation has granted to the Technology authorities a long term lease not only of the land on which the boat club stands but of a two hundred foot frontage on the river, thus allowing for an expansion in the physical equipment which is inevitable. With this sound and essential basis it is now purposed to carry out a plan for general rowing at Technology which shall harmonize with the various policies already established for the conduct of student activities and which shall exemplify in largest measure the basic principle of all the student interests at the Institute, namely, that a sport is successful only in proportion to the number of men that it attracts, wholly independent of the number of victories won.

At Technology, the conduct of student affairs rests in the hands of the student body. The Alumni concern themselves so far that they elect various advisory councils which co-operate with the student governing bodies in the several branches of student activity but function implicitly as their name implies. The Faculty at the Institute, as such, exercises no jurisdiction over student activities. The Corporation as the body in whom all control is ultimately vested delegates its authority to the Alumni Association and to the student body direct. There are, then, the several interests of the Corporation, of the Alumni Association, its Advisory Councils and of student governing bodies to correlate, leaving, however, the final conduct of the undergraduate affairs in undergraduate hands.

That rowing may be conducted, certain specialized equipment is essential and for its maintenance, care, and use, certain special provisions must be made. In the first place, the care of the boats and oars with the repairs incident to use have been placed in the hands of the caretaker of the building, himself an oarsman of experience and also a practical boat builder. As the plan progresses, it is hoped that with such assistance as may be necessary, the building of shells will become a part of the function of this department. At the present time, the student body owns a number of shells and wherries which have been purchased either from its funds or donated by friendly Alumni or those sister associations whose friendly co-operation has already been mentioned. With the purchase of the boathouse came a certain number of craft which had been the property of the B. A. A., but the main equipment is the property of the student body as such. That this equipment shall have the most extended use is of course the first object, but as such use entails losses through wear and accident, some provision must be made for the expense of upkeep. To this end, a small charge will be made for the use of boats to the individual students, comparable to the charge made to ensure the upkeep of tennis courts. Rentals for the housing of private boats, locker charges, and so forth, will all be turned in to the general fund to be used for maintenance, repair and replacement. Additional equipment must also be added and to this end the Alumni have been, and will be, asked to contribute. Already several generous contributions have been made, amounting to several thousand dollars and there is every reason to expect that the benevolent practice will continue.

When it is stated that there were over two hundred men in the initial rowing squad and that over one hundred of these were carried throughout the season last completed, it can readily be seen that the sport, although young, is extremely vigorous and a steadily increasing number of all types of boats must be added.

The general policy adopted throughout in the operation of undergraduate activities at Technology is to give to the undergraduates themselves the large measure of the conduct of their own affairs. To carry out this idea, a boathouse committee will be organized during the coming year with the past manager of the Crew — a senior — as its chairman. This committee will operate and govern the boathouse. It will be directly answerable to the Institute Committee, the representative student governing body in control of all student activities.

The Alumni Council will elect an Advisory Council for the boathouse similar to the other Advisory Councils now operating under it and with activities similar to those already constituted. This Advisory Council of Alumni will meet at stated intervals with the Boathouse Committee. This joint body will operate the boathouse, the older men in an advisory capacity, the younger as the source of administrative power. This

joint committee constitutes the liaison between the Alumni and the undergraduate committee. The prime purpose of this committee will be the promotion of general rowing at the Institute, offering every inducement to the undergraduates as a whole to make use of the boathouse and its equipment, and offering to the student body a new outlet for activity in a recognizedly clean and wholesome exercise.

The competitive rowing in its conduct will remain under the jurisdiction, on the one hand, of the manager of the crews who is the elected officer of the M. I. T. Athletic Association, and, on the other hand, the Advisory Council on Athletics. This separation is necessary as the competitive rowing forms one of the group of athletic activities intercollegiate in character and susceptible to and operating under groups of rules drawn up by the various intercollegiate governing bodies. Questions of elegibility and others of a similar nature fall within the province of the Athletic Council. In a word, the Advisory Council on the Boathouse will operate the intra-mural, and that on Athletics will continue to operate the extra-mural, phase of rowing. A common Secretary for both Councils will secure the liaison between them.

While the Corporation is responsible for the care and maintenance of the building and the various rentals and fees will provide for the maintenance of existing movable equipment, definite provision must be made for additional funds to be used in the purchase of new equipment of this type whereby the ever-increasing numbers of students may be provided for. One source of income has already been touched upon. For example, the Technology Club of New Hampshire, a short time ago voted the E. W. Rollins Fund for this purpose. Individual donors have also made most generous and welcome contributions as the recent gift by Mr. Henry Morss of the new coaching launch. To ensure, however, a steady source of income for this necessary purpose, the Technology Boat Club has been established. This is a club composed exclusively of Technology Alumni who make a yearly contribution in the form of dues for membership. The officers of the Club are ex-officio members of the Advisory Council on the Boathouse. The funds accruing from dues are to be expended solely for the purpose acquiring of new equipment.

From the standpoint of intercollegiate athletics, the question of competitive rowing is the vital one. As has been outlined in the preceding paragraphs, general rowing at Technology is the primary interest and object of those concerned with the conduct and development of the sport. At the same time, it is clearly recognized that the competitive factor is the strongest possible incentive, and to that end every effort will be made to develop competitive crews of a high grade. Certain peculiar conditions, however, attach to this aspect which may be of interest. Athletics at Technology at the present time are supported from a student tax or due of approximately nine dollars per capita. Of this, athletics have received in the past $2.50, but a recent action of the Corporation authorizing the student body to reapportion this tax and themselves assuming certain heavy financial obligations formerly met by it, will increase the athletic proportion to about five dollars per capita per year. During the last year, the money accruing from the direct athletic return was in the neighborhood of eight thousand dollars; gate guarantees, class apportionments and outside donations raising the total income to approximately fifteen thousand dollars. The increase in the student tax will make the total amount available from this source about equal to last year's budget, but certain of the sources of income available last year will cease to be effective, so that the total available income for the coming year is estimated to be approximately nineteen thousand dollars. On last year's budget, thirty-one teams were operated in various forms of sport. The same or a greater number will function during the coming year. Competitive rowing has been supported by the student body in the years gone by and the student body will be called upon to support it in the years to come. It can be readily seen from the above analysis that the amount of money available for rowing — one thousand dollars — cannot be increased. Where the sport is carried on with such limited financial support there must be a large measure of the most sportsmanlike assistance and co-operation in all possible directions. Technology crews, for example, in competing with those away from Boston, are loaned shells by their hosts. The crew men meet from their personal resources a considerable part of their traveling expenses. It is felt at Technology that this is wholly desirable, as it is typical of the best spirit of amateur sport and tends to engender in every young man who competes under these conditions, a wholesome attitude in regard to sport and a confirmation in essential amateurism.

The most outstanding feature, however, in the whole scheme for the competitive rowing rests upon the coaching of the crews. Some years ago the Institute was fortunate enough to enlist the interest of Mr. Arthur W. Stevens, a graduate of Harvard, and a keen follower of the sport of rowing. For a time, Mr. Stevens assisted the embryo Technology crews to their great advancement. Under the new system, Mr. Stevens has consented to take over the coaching of the competitive crews. It is expected that he will be assisted during the coming year by some of the Technology alumni and that in this way a purely amateur system of coaching will be developed.

The constant cry daily growing louder in volume against the commercialization of college athletics finds its best answer in the development of systems such as that outlined above.

The Tech Boat House — Just Below the Cottage Farm Bridge

The Hampden County Memorial Bridge

How the bridge connecting Springfield and West Springfield was designed and built largely by Tech Alumni

By CHARLES M. SPOFFORD '93*
Hayward Professor of Civil Engineering, M. I. T.

Seldom has the completion of a new bridge been marked by a two-day celebration such as accompanied the dedication on August 2–3 of the new reinforced concrete arch bridge across the Connecticut at Springfield. Boat races by day, a Venetian pageant by night, illumination of the bridge by colored lights, an historical parade, dancing on the streets and in the Municipal Auditorium, dedicatory exercises with numerous speakers, including the Governor of Massachusetts, elaborate fireworks, odes to the bridge by local poets, a special illustrated bridge edition of the famous Springfield *Republican* on the Sunday preceding the ceremonies with thirty-seven pages given up to descriptions of the new bridge, and of bridges in general, holiday crowds in the streets and on the bridge, all combined to show the importance attached by the public to the completion of this important new artery of commerce spanning a great New England river.

One of the Main Towers

In the design and supervision of construction for this new bridge, no less than fifty-seven Technology Alumni have been connected, in an engineering capacity. Others have served as principals and subordinates in several of the contracting firms which carried on the actual work of construction. Consequently, it is especially fitting that an account of the bridge should be recorded in Technology's official magazine.

The first bridge across the river at Springfield was a wooden Toll Bridge, built in 1805. This bridge was so weakened by floods that nine years after its completion, it gave way under a load of army supplies and was torn down. Another wooden bridge was built on the same site in 1816. Each of these bridges was financed by a lottery, a common device for raising funds for bridges since the days of the old London Bridge — a device apparently not disapproved by the clergy, since a sermon was preached and a prayer offered at the dedication of one of these bridges.

The second of these early wooden bridges lasted but two years, and was then partly carried away by a flood. This bridge was, however, restored in 1820 and had continued in practically continuous service since that date, although requiring extensive and frequent repairs and strengthening. In 1918, however, its condition became so bad that it was closed to vehicular traffic; three additional piers were built, the three longest spans were replaced by new timber spans, and the trusses of the shorter spans and the entire floor were strengthened.

Before this last extensive reconstruction, the old bridge, after a century of use, had become a curious looking structure. It was warped sideways and had settled vertically so that it was difficult to see from one end to the other through its tunnel-like and serpentine roadway. It swayed under passing loads to an alarming extent and arrival at the other end marked a feeling of relief in the minds of those not hardened by regular use of it.

In addition to being unsafe, the old bridge, built when Springfield and West Springfield had a combined population of only a few thousand instead of the 150,000 now dwelling in these cities, had become entirely inadequate for the volume of traffic and would have been replaced long ago had it not been for disputes as to the proper location for the new bridge.

Finally, the bridge situation became so acute that the unusual expedient was adopted of obtaining authority by an act of the Massachusetts Legislature for the appointment, by the Supreme Court of Massachusetts, of a Board of Commissioners, none of whom should be a resident of the County, to determine the location for a new bridge, make the necessary plans and estimates of cost, and apportion the expense of the project between the County and the various municipalities especially benefited. This commission, consisting of the Honorable John L. Bates, Chairman; Honorable Joseph H. O'Neill and Joseph R. Worcester, Esq., all of Boston or vicinity, was appointed on September, 1915, and after four years of public hearings, engineering and other investigations, made its final report to the Supreme Court, this report being accompanied by an unusually complete set of plans and specifications for the bridge and its approaches. The report was soon confirmed by the Court and, after discussions and investigations extending over a score of years, the way was finally cleared for the start of construction.

This long period preliminary to the beginning of construction forms an excellent illustration of the difficulties which often develop in connection with a public project as well as of the importance of a great bridge to the community which it serves.

According to the legislative act authorizing the bridge, the County Commissioners of Hampden County were, upon the approval by the Court of the Bridge Commission's Report, required to proceed forthwith with the construction. The Commissioners promptly took steps to prepare the necessary documents for competitive bidding, and on March 10, 1920, opened bids from various contractors for the construction of the bridge proper, the approaches and miscellaneous work being left for later contracts. The contract was awarded on April 3, 1920 to the lowest bidders — H. P. Converse & Company of Boston, a copartner-

*Besides his connection with Technology, Professor Spofford is a member of the consulting firm of Fay, Spofford & Thorndike, designing and supervising engineers of the bridge, largely composed of Technology men. Frederic H. Fay is a member of the class of '93 and was president of the alumni association in 1913. Sturgis H. Thorndike is a member of the class of '95.

ship consisting of Mr. Converse and Edwin P. Bliss, M. I. T. '97.

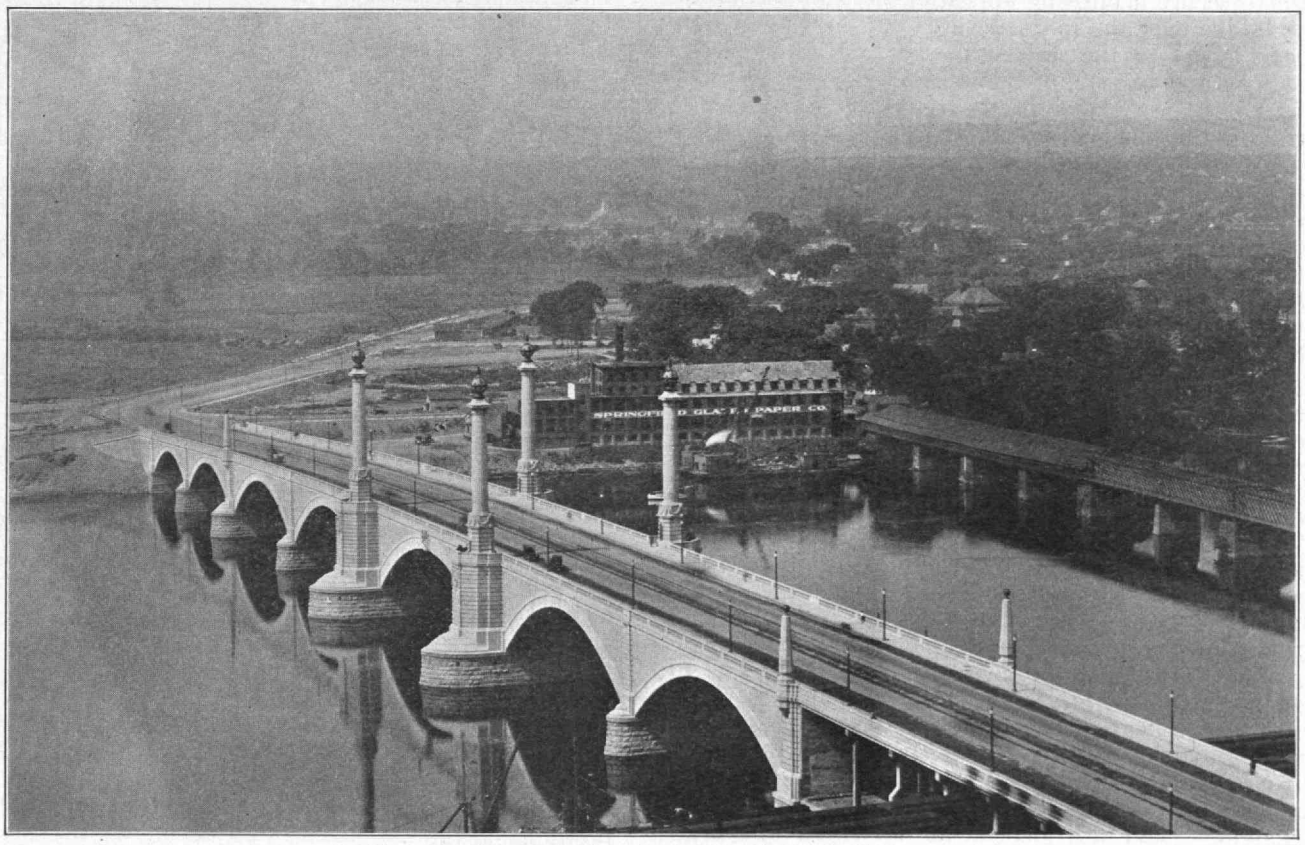
Other contracts were later awarded for changes in the railroad yard, for approaches, and for the removal of the old toll bridge. Amongst the successful bidders for these contracts were Daniel O'Connell's Sons, including George P. O'Connell, M. I. T. '02, and the Adams and Ruxton Construction Company, E. J. Ruxton, M. I. T. '03, President.

The work under the first contract, that for the bridge itself, was completed on July 31, 1922, twenty-eight months after the contract was signed. No difficulties not foreseen from the beginning developed during the progress of the work and the date of completion was that determined upon in the beginning, and specified in the contract.

immediately after its completion. Work is still under way on the other approach streets on the west side of the river, which require a large amount of filling. These will be completed before long.

The removal of the old toll bridge, at a cost exceeding the original cost of construction, and the completion of the work of lowering of the railroad yard could not be begun until after traffic was diverted to the new bridge. It is expected, however, that this portion of the work will be completed by the end of the current year.

The bridge has a total length of 1500 feet, of which 1200 feet are over the river, and 300 feet over the New York, New Haven and Hartford Railroad freight yard on the Springfield river front. The width of the bridge is 80 feet, giving a 60-foot roadway and two sidewalks.



Looking west, along the bridge, showing the West Springfield approach
The old bridge is seen at the right

The work could have been carried through even more quickly if it had not been for the large amount of dredging required in the river to safeguard the interests of navigation. No dredges were available at Springfield and dredges of size sufficient to do the work in a reasonable time could not be brought up the river intact on account of the small size of the Windsor Locks, twenty miles below Springfield. The dredges and a considerable amount of other pieces of floating equipment required for the work were, however, actually brought through the Locks, but had to be dismantled, cut into sections and reassembled before they were ready for use. This required a considerable amount of time. Other pieces of equipment were built in Springfield.

The approaches on the Springfield side of the river were practically completed on the above date also, as was one important approach street on the West Springfield side, thus permitting the full use of the bridge

The river portion consists of seven arch spans varying in length from 110 to 176 feet. The portion over the railroad yard consists of a viaduct of nine spans. The approaches on the westerly end extend about one-half mile beyond the end of the bridge and give direct access to a large vacant territory directly opposite the business portion of Springfield.

Realizing the importance of this bridge, all connected with its planning agreed from the outset that the structure should be of permanent construction, of capacity sufficient to provide for future traffic for many years, of pleasing appearance and with adequate approaches at either end. In carrying out these purposes, the bridge has been constructed of reinforced concrete with the piers protected from frost and from damage by floating objects by granite facing from below the low water line to the level of high water. A number of ornamental features were introduced, and these, as well as the coping courses and balustrades on

the river bridge, are constructed of a high-grade artificial stone. The total width of the bridge is sufficient to provide for three lines of traffic in each direction, giving it an enormous capacity, sufficient for any traffic that is likely to take this route. The strength of the bridge is sufficient for the heaviest of motor trucks, for trolley freight cars weighing seventy-five tons each and running in two-car trains, and for the heaviest of modern artillery. So far as can be foreseen, the bridge will have sufficient strength and capacity to carry any traffic which can be brought to it over the highways leading to it.

In planning the bridge, the most careful thought was given to determining the proper number of arch spans and the proper ratio between their rise and length, in order not only to obtain economical construction but also to secure a pleasing appearance. The portion of the bridge over the railroad yard could not have arch spans, owing to the necessarily low elevation of the roadway and in view of this and because the channel was not in the center of the river, but considerably nearer the Springfield side, it was not feasible to design an entirely symmetrical structure. It was, however, found possible to repeat two arch spans on either side of the channel span, hence the five spans forming that portion of the bridge are symmetrical with respect to the channel span. This symmetrical portion of the bridge is marked by two small pylons at each end as shown in the illustrations. The other two arch spans are of lesser length than any of the arch spans abovementioned, and in a measure balance the viaduct across the railroad yard.

The piers flanking the channel span are necessarily large in order that they may serve as abutments and also provide space for machinery if navigation needs ever require that the arched channel span be replaced by a draw span. This contingency seems extremely unlikely, but the legislative act authorizing the bridge required that such provision should be made. The channel piers are marked at each end by two high towers surmounted by powerful lanterns, the towers serving to designate the channel and to relieve to a certain extent the large size of these piers. Each of these towers bears a memorial tablet in bronze, commemorating the deeds of Hampden County citizens in the pioneer and colonial period, the revolutionary war, the civil war and the later wars on foreign soil. The remaining piers are dependent for their stability against overturning upon the lateral support furnished by the adjoining arch spans. A carefully planned system of erection of the ribs and floor systems in the arch spans was carried out in order to insure stability of these piers during construction.

The piers and abutments are supported by about 10,000 wooden piles driven to a bearing in clay and having a length of from 20 to 40 feet. Upon these, concrete was placed by means of bottom dump buckets up to about seven feet below low water, the remainder of the foundation being built in the dry, the water being excluded by a timber cofferdam.

The use of reinforced concrete made it possible to dispense with the barrel arch with its heavy earth fill retained between side walls, the method of construction commonly used for masonry arch bridges since the days of the Romans. Full advantage of the possibilities of this modern material has been taken in this bridge where the saving in weight was particularly important, owing to the soft river bottom. Five separate ribs are used in each span, in place of the barrel arch. Columns supported on the ribs, carrying girders and floor slabs, are used instead of an earth fill, thus giving a permanent floor, ready for final paving immediately upon completion. In addition, this construction eliminated the weight of an earth fill, and the long period necessary to allow for its settlement, before a permanent roadway surface could be laid upon it.

Spandrel walls were used (although they were not required for structural purposes) in order to screen the numerous columns and girders which otherwise would present a confused appearance.

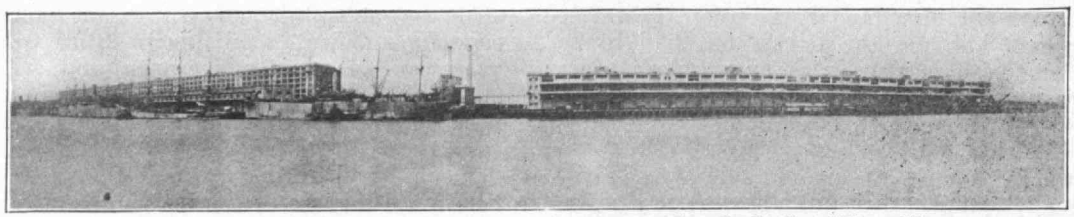
The Connecticut River, while not especially deep at Springfield, is subject to rapid high floods and to severe ice conditions. It was consequently desirable to select a type of construction which would eliminate danger from such sources while the bridge was under construction. It was therefore decided to make the reinforcement of the arch ribs in the form of latticed steel arches which in themselves had strength enough to carry their own weight plus the weight of the rib concrete and its forms. These ribs were shipped in two or four sections, as found convenient, and were erected in place very quickly, needing only a few temporary bents of falsework in the river. The whole process of erecting all the ribs in one span took only a week. With the steel ribs in the span once erected, the falsework was taken down and the remainder of the work carried out without risk to the structure from floods or ice.

The total cost of the entire bridge, including land takings and damages, will be approximately $6,000,000 of which the cost of the construction work, including the bridge and its approaches, the lowering of the railroad yard and the removal of the old toll bridge, amounts to approximately $3,880,000.

Among the Technology men holding important positions on the engineering staff during the periods of design and of construction may be mentioned the following:

G. L. Mirick, '93, in general charge of construction; Harry E. Sawtelle, '98, office engineer; C. A. Farwell, '07, designing engineer and resident engineer during construction; and B. A. Bowman, '09, designing engineer.

The firm of Haven & Hoyt of Boston acted as advisory architects.



The South Boston Army Base—War-Time Work Done by Fay, Spofford and Thorndike

Medals and Orders

Foreign Honors Recently Received by Technology Men

The strikers of medals and the engrossers of scrolls have recently been having a busy time of it. It is scarcely believable that the employment situation can be slack among them. Seemingly, there is but one group responsible for their industrial activity and this group is composed entirely of former students and faculty members of the Massachusetts Institute of Technology.

Recently the Foreign Honors of six men have come to light. One received a military decoration, one received an honorary degree, another did the same and became a Chevalier of the Legion of Honor into the bargain. Three were appointed to what might be called technological ambassadorships — one to France, one to Brazil and another to South Africa. None of these conferments, you see, are domestic ones. Not that the value of such is less, but because some arbitrary restriction on the catalog is unfortunately necessary.

Photo Copyright, Harris & Ewing

Major-General Harry L. Rogers, '89, receiving his decoration as Commander of the Order of the Crown, from Colonel the Marquis, V. A. Bernezzo, of the Italian Army.

The winner of the military decoration is Major-Gen. Harry Lovejoy Rogers, Quartermaster-General of the United States Army. He is a member of the Institute's Class of '89. During the summer he received the insignia of Commander of the Order of the Crown from Colonel the Marquis, V. A. Bernezzo, at the Italian Embassy, in Washington, in recognition of his services during the World War. He was, during the war, the Quartermaster-General of the entire A. E. F. and as such, he was the man responsible for the feeding and clothing of 2,000,000 men, removed from their home base by some three thousand miles of water. Obviously, this was a task for a Technology man and obviously, also, General Rogers performed it as became one.

Professor Joseph Lipka of the Department of Mathematics was one recipient of a foreign honorary degree. Professor Lipka was one of the twenty American delegates who were present in the Spring of this year at the celebration which attended the 700th anniversary of the founding of Galileo's University — the University of Padua.

Dr. Lipka is now by virtue of his appointment as delegate from Technology, "Doctor of the University of Padua."

The second recipient of a foreign honorary degree this year is Prof. A. E. Kennelly of the Department of Electrical Engineering at Harvard and at Technology. Dr. Kennelly is now a Doctor of Science of the University of Toulouse. In addition to this, he was made a Chevalier of the Legion of Honor by the French Government. The University of Toulouse has not flung its honors about lightly. The degree which Dr. Kennelly holds is one of not more than four or five granted since the founding of the University.

One of the three of Technology's ambassadors to foreign countries is Professor William Emerson, head of the Department of Architecture, who is a member of the organizing committee appointed by the French Government to have charge of the exhibition of American art to be held in Paris in the Spring of 1923 and which is to be held in the Jeu de Paume in the Tuileries Gardens.

The second ambassador is Calvin W. Rice, '90, the Secretary of the American Society of Mechanical Engineers, who sailed in August on the steamship *Pan-America* as delegate of his Society to the International Engineering Congress at Rio de Janeiro. He sailed on August 23 in company of Secretary of State Charles Evans Hughes.

The third ambassador is Professor-Emeritus Robert H. Richards, '68, who has been elected an honorary member of the Chemical, Metallurgical and Mining Society of South Africa. From 1873 to his retirement in 1914, Professor Richards was head of the Department of Mining and Engineering in charge of the mining and metallurgical laboratories. Many honors have come to him in his profession. He was elected to the presidency of the American Institute of Mining and Metallurgical Engineers in 1886 after having been vice-president for several years. He received the degree of LL.D. from the University of Missouri in 1909 and was awarded the Gold Medal of the Mining and Metallurgical Society of America. In 1915 he traveled extensively in this country and Europe to gain ideas for the creation of the Mining and Metallurgical Laboratory. Professor Richards is the author of four volumes on ore dressing, which are standards on the subject. Two noteworthy inventions are accredited him, the Richards pulsator and the Richards jig, which are now in extensive use.

The Status of the Educational Endowment Fund

Figures and a Chart which show amounts paid, unpaid, and not yet due

Nearly three years have elapsed since the successful completion of the Educational Endowment Fund which gave Technology the identity of "Mr. Smith." With the coming of a new President on January 1, it is interesting to investigate the present status of the fund that was the crowning achievement of Doctor Maclaurin's career, and for which it may almost be said he gave his life.

The statistics on this and the opposite page show the condition of the subscriptions, exclusive of the income derived from the gift of Mr. Eastman and from the contracts made under the so-called Technology Plan.

It is of particular interest to note that of the total of $2,927,749.87, 73% has been paid and 15% is not yet due. Thus, in spite of the adverse economic conditions which the country has suffered in the past months and in spite of the fact that these pledges were signed at the peak of the post-war inflation, only 12% of the subscriptions are overdue. The total elapsed time between Jan. 1, 1920 and Nov. 1, 1922 is 1034 days, and on the average the Institute has received a little over $2054 per diem during this period.

The statistics relative to the Technology Plan contracts applied to the Endowment Fund for this period are:

Total Amount Signed	$1,082,930 or 100%
Amount Paid	730,468 or 67.4%
Amount Overdue and Unpaid .	44,630 or 4.1%
Amount not yet Due	307,832 or 28.5%

Thus the Technology Plan has added a little over $700 per diem to the Institute permanent endowment fund.

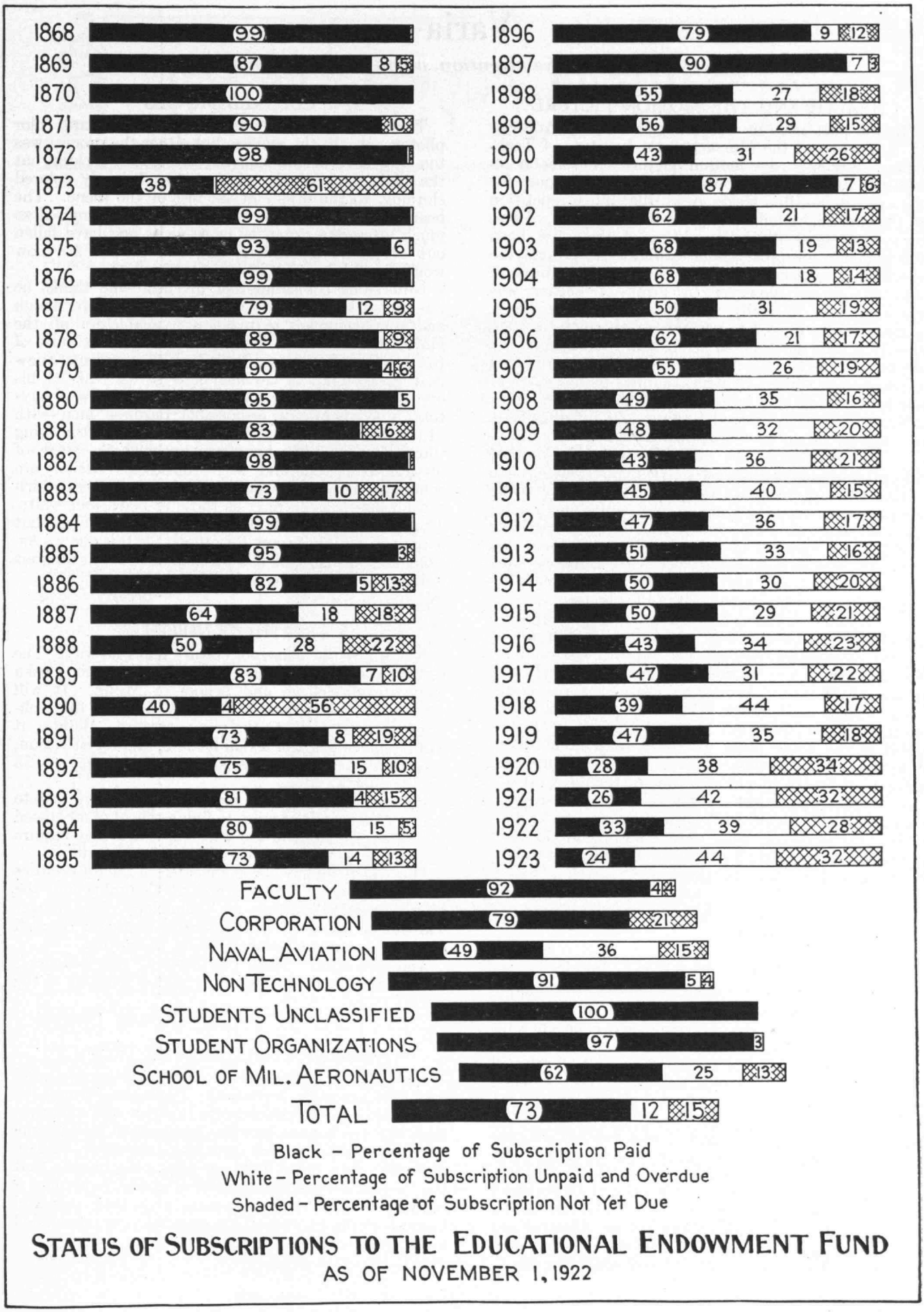
The amount not yet due will be materially reduced on January 1, at which time $155,066 of payments will become impending. If all the amount is paid, as seems likely, the "total amount paid" will become 81.7% of the amount of the contracts.

The status of the Fund as a whole, excluding the Eastman gift, was on November 1:

Total Amount Subscribed . .	$4,010,679.86 or 100%
Total Amount Paid	2,853,811.34 or 71%
Amount Overdue and Unpaid	390,446.26 or 9.7%
Amount not yet Due	766,422.27 or 19.3%
Average daily payments from Jan. 1, 1920 to Nov. 1, 1922:	$2,759.97

ROLL CALL OF THE CLASSES

Class	Subscribed	Paid	Past Due
'68	$ 3,855.00	$ 3,805.00	$ .....
'69	760.00	660.00	60.00
'70	5,622.00	5,652.00	.....
'71	9,847.50	8,857.50	.....
'72	3,017.00	2,967.00	50.00
'73	60,025.00	2,2753.32	655.00
'74	13,135.00	13,080.00	10.00
'75	10,415.00	9,711.00	595.50
'76	33,205.00	32,925.00	205.00
'77	4,816.00	3,797.25	600.00
'78	8,280.00	6,975.00	130.00
'79	8,000.00	7,160.00	300.00
'80	3,880.00	3,680.00	200.00
'81	23,134.12	19,254.12	240.00
'82	12,421.00	12,121.00	175.00
'83	5,360.00	3,940.00	760.00
'84	517,891.00	515,601.11	1,439.99
'85	45,672.50	43,401.00	1,515.00
'86	12,441.00	10,193.34	647.67
'87	27,916.20	17,771.20	4,985.00
'88	109,386.00	51,071.01	30,684.99
'89	39,941.00	33,074.01	2,718.33
'90	243,103.00	97,814.34	8,836.67
'91	42,293.75	30,764.51	3,535.00
'92	40,859.00	31,344.00	6,030.00
'93	200,871.00	162,071.64	7,980.00
'94	63,293.00	50,283.50	9,590.00
'95	46,016.00	33,579.34	6,371.66
'96	57,211.00	45,205.37	6,279.63
'97	100,731.00	90,639.69	7,100.00
'98	50,354.00	27,562.35	13,581.66
'99	23,454.00	13,052.33	6,886.67
'00	28,235.50	12,395.75	8,806.41
'01	86,056.65	75,142.99	6,410.00
'02	41,271.00	25,648.00	8,472.00
'03	26,693.50	18,101.65	5,082.16
'04	25,198.00	17,121.50	4,575.50
'05	35,433.33	17,737.57	11,134.66
'06	40,183.00	24,699.01	8,602.00
'07	29,529.20	16,289.20	7,684.98
'08	18,038.00	8,824.67	6,264.16
'09	18,661.50	9,015.37	5,969.00
'10	20,652.00	8,842.68	7,399.33
'11	27,431.00	12,337.27	11,008.83
'12	27,529.00	12,922.56	9,821.51
'13	25,593.62	13,084.55	8,451.33
'14	27,787.50	13,952.84	8,352.66
'15	22,925.00	11,554.16	6,765.32
'16	23,606.00	10,083.43	8,023.17
'17	38,276.00	17,906.77	11,704.87
'18	19,583.00	7,552.67	8,689.82
'19	20,376.50	9,519.19	7,158.85
'20	23,108.00	6,578.59	8,672.08
'21	32,965.00	8,714.58	13,685.91
'22	37,453.00	12,502.26	14,632.81
'23	24,663.00	6,034.57	10,791.38
Non Tech	295,207.00	268,882.33	14,774.00
Naval Aviation	1,038.50	513.50	375.00
S. M. A.	675.00	419.00	170.50
Corporation	77,520.00	61,520.00	.....
Faculty	3,260.00	2,985.00	125.00
Student Organizations	1,595.00	1,544.75	50.25
Students Unclassified		150.00	.....
	$2,927,749.87	$2,123,343.34	$345,816.26



Black – Percentage of Subscription Paid
White – Percentage of Subscription Unpaid and Overdue
Shaded – Percentage of Subscription Not Yet Due

STATUS OF SUBSCRIPTIONS TO THE EDUCATIONAL ENDOWMENT FUND

AS OF NOVEMBER 1, 1922

Varia

In which several things receive attention, among them the motion picture

HEALTH AND THE MOTION PICTURE

In the past issue of *The Nation's Health*, Professor C. E. Turner, of the Massachusetts Institute of Technology, discusses the motion picture as a factor in health education. The possibilities are obvious, for the eye catches, in a single view, what much repetition to the ear, might fail to impress on the mind. There have been some difficulties. One of these has been the tendency of professional exhibitors to present the spectacular rather than the scientific. An example of this, not quoted, however, by Professor Turner, was the exhibition of really valuable under-water views. A man was employed to accompany the pictures with a lecture, and he was, so to speak, "at sea," in the matter that he classed the corals as fish, and committed various other similar blunders, adding to the stock of mis-information of a large share of his hearers. This difficulty has been bridged to an extent by the efforts of a special group of educational men, who have been able to emphasize the educational end. Another difficulty has been the restrictive regulations. State authorities and insurance rules have in the past made the process of showing films prohibitive for the general class of students. The use of non-inflammable films and the development of safe portable projectors has removed some of the difficulty here, and in this perhaps the professional was not very active, looking possibly with disfavor on films outside the showhouse.

The Society of Visual Education has undertaken the production of quite a series of educational films, in history, geography, nature study, health and the like. There are three films of this character in health already prepared, "Getting Acquainted with the Bacteria," "Waste Disposal in Cities," and "Unhooking the Hookworm." These films are but the suggestion of possibilities and some other groups or individuals have undertaken the preparation of motion pictures on subjects of health education. One of the most attractive of these is Stuart's French film, "Conquest of Tuberculosis," which with a picturesque setting in France and Corsica, with gayety and Vendetta, and the recovery and happy marriage of the hero, teaches, interests and satisfies the unities.

— Boston Transcript.

THE TRAVELER IS RIGHT: HE IS

Richard A. Hale of Lawrence enjoys the unique distinction of having been secretary of his class, Massachusetts Institute of Technology, ever since his graduation in 1877. Of that class, which, including non-graduates, numbered about 125, about 60 are still living. This is in line with the usual Harvard class ratio, where statistics prove that a class 45 years out of college has usually lost about half its members. Mr. Hale's splendid appearance and manner indicate that he will be permitted to serve his class many years to come. He is fond of golf and has played on many of the world's famous courses. To plenty of healthful outdoor exercise and an optimistic point of view of life, Mr. Hale can doubtless attribute his fine physical and mental condition. He's as hale as the name he bears.

—Boston Traveler.

COLORED MOVIES

There have been several attempts to adapt color photography to the movies, but either the process was too expensive or the cameras insisted on picking out the high spots of the picture, like brightly colored clothing, to the injury of the rest of the scene. The beautiful effects of still life in color which aroused so much interest a dozen or more years ago have fallen out of public exhibitions and the movies are now wonders of ingenuity in black and white.

Now along comes another inventor who thinks he has solved the difficulty with a process cheap enough and simple enough to make it available for all the movie studios. He is Daniel Frost Comstock, once of the faculty of "Boston Tech," as the students know that great school. He has been seven years at his invention and former District Attorney Jerome says that a syndicate of responsible business men with $1,000,000 capital has been formed to push the thing through. The films have now reached the stage of private exhibition and Mr. Comstock's friends are confident that he can produce colored pictures which can be shown as cheaply as those in black and white. The cinema is a storehouse of mechanical wonders, but it undoubtedly has room for others. If this one works, Colonel Mulberry Sellers's old slogan, "There's millions in it," will be an understatement of the result.

—Brooklyn Eagle.

FARTHEST NORTH

Northward the course of culture takes its way. The new venture in education will be called the Alaska Agricultural College and School of Mines. It will accomplish the purpose of actually carrying the technical school straight to the mine entrance. Besides, it will be in the heart of a rich farming and forest region, despite the fact that its latitude is 64 degrees 55 minutes north.

Heretofore, the young men of Alaska have had to journey thousands of miles to find a school of advanced theory and practice in the sciences, which they require to progress in the busy life of the giant Territory.

Many of them have been educated in the universities of the Pacific coast States and at Columbia and the Massachusetts Institute of Technology. No longer will this be necessary if the plans of President Bunnell and his sincere well-wishers come to fruition.

And the title, "Most Northern of the Colleges," cannot be gainsaid by any other seat of learning in the world.

—N. Y. Evening Telegram.

"THE GREEN GOLD OF THE TROPICS"

Are you concerned with calories, vitamines, and such-like scientific novelties? Professor Samuel C. Prescott, of the Massachusetts Institute of Technolgy, finds that the banana provides more actual food for the same cost than any other fresh fruit, vegetable, or fish, and more than meat, milk, or eggs. He reports that the banana is a far more useful all-round food than a pure meat diet. Ripe bananas, with their powerful tissue-building character, are especially recommended for growing children.

—The Outlook.

TECH MEN IN THE PUBLIC EYE

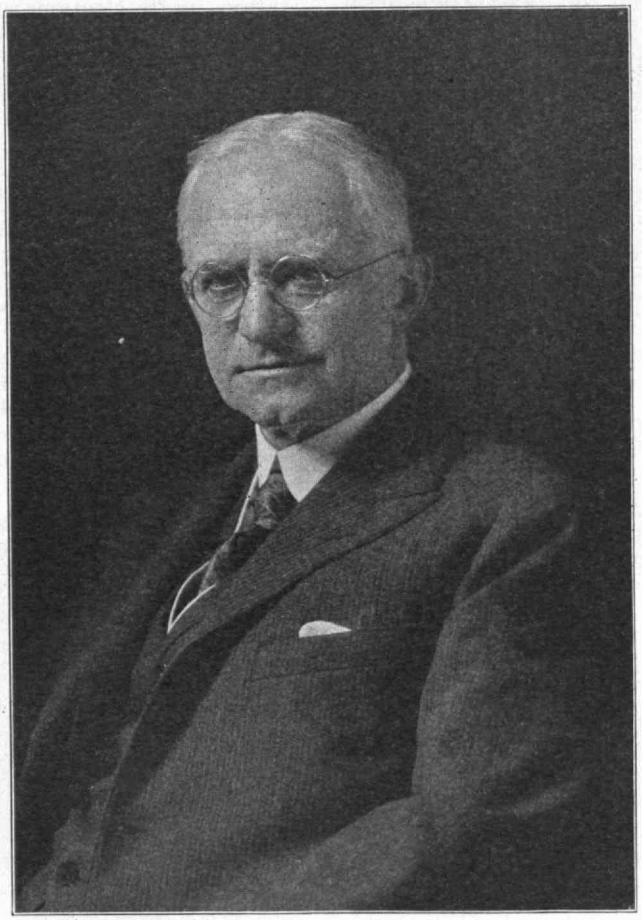
ALBION N. DOE, '20

The views of Rhode Islanders on how to inaugurate an extension engineering department best fitted to Rhode Island's needs are sought by Albion Noyes Doe, engineering and industrial expert to whom has been entrusted the task of establishing the proposed new department at the Rhode Island State College. Mr. Doe wishes to ascertain how cooperative work of the sort made possible through an extension engineering department can best be adapted to industrial conditions in this State.

The State College has long planned to add a department of the nature outlined above, closely patterned after the extension engineering departments functioning in colleges in other industrial States. Extension work sends education to students and others who cannot attend the regular college classes, and through close contact with industries, gives them the use of the knowledge, study and other facilities of the college, and also tends to keep teaching in the college practical and up to date.

Professor Doe, a graduate of the Massachusetts Institute of Technology, who has been conducting a course in business administration at the State College, has specialized in the operation, management and financial problems of industry. He has been teaching three years. He is a consulting engineer specializing in industrial management, and is interested in several very successful business enterprises. The entire engineering staff of the college, consisting of specialists in all branches of engineering and business management, will assist in the work of the new department.

—*Providence (R. I.) Journal.*



"WE NOMINATE FOR THE HALL OF FAME"
GEORGE EASTMAN:

Because, beginning as an amateur photographer he invented the Eastman kodak; because he has conducted his philanthropy anonymously for years concealing from the public the fact that he was making large contributions to the support of Massachusetts Institute of Technology; because he has done more than anyone else in the world to make the camera popular and cheap; and, finally, because he has just made a present to the city of Rochester of a large and beautifully decorated theatre, suitable for the most elaborate sort of opera, drama and moving pictures.

—Vanity Fair, for October, 1922.

DANIEL CHESTER FRENCH, '71

Daniel Chester French, the sculptor of the widely-pictured statue of Abraham Lincoln which is the central feature of the Lincoln Memorial of the Potomac in Washington, is a former student at Technology. He was a member of the class of '71 in architecture and remained at Technology during the year 1867 and 1868. He was born in Exeter, N. H., on April 20, 1850, the son of the Honorable Henry Flagg French and Anne Richardson French. Besides his work at Technology he studied under Dr. William Rimmer of Boston and Thomas Ball in Florence. He received the honorary degree of Master of Arts from Dartmouth in 1898, from Yale in 1913, and the degree of Doctor of Literature from Columbia University in 1913. He married Mary French of Washington in 1888. Among his best-known works are: "The Minute Man of Concord," the statue of General Cass in the capitol at Washington, the statue of Rufus Choate in the Boston Court House, of John Harvard at Cambridge, "Dr. Gallauet and His First Deaf-Mute Pupil," the Millmore Memorial, the colossal statue of the Republic at the Chicago Exposition, the bronze doors of the Boston Public Library, the Alma Mater statue on the steps of the Library of Columbia College. He is likewise the sculptor of the four groups — Europe, Asia, Africa and America — in front of the New York Customhouse, the statue of E. Rockwood Hoar in Worcester, the statue of James Oglethorpe, in Savannah, Georgia, the statue of Abraham Lincoln at Lincoln, Nebraska. He received the Medal of Honor at the Paris Exposition in 1900. He is a member of

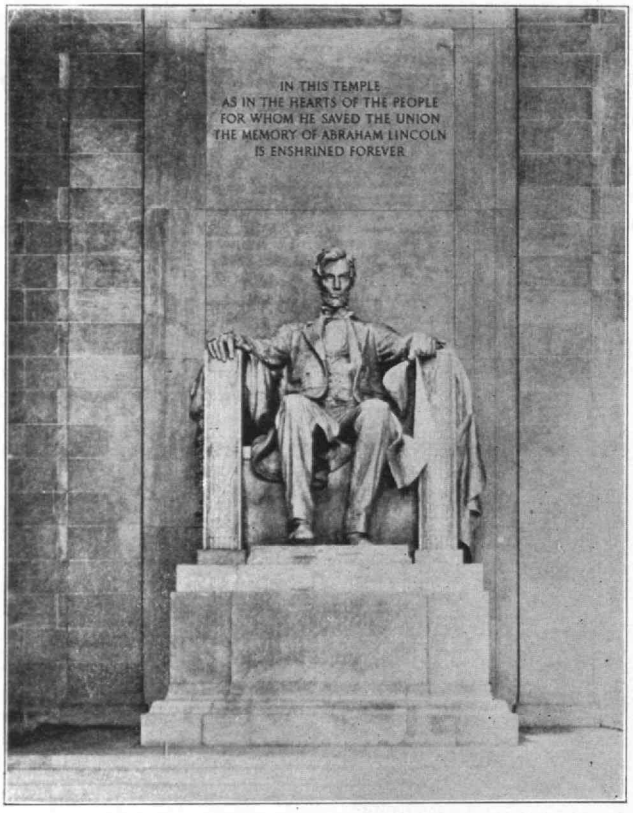


Photo Copyright, Harris & Ewing
The Statue of Lincoln, of which Daniel Chester French, '71, is the Sculptor

the National Academy and trustee of the Metropolitan Museum of Arts, the Honorary President of the Natural Sculptor Society, a member of the Architectural League, the Accademia de St. Luca, Rome, and a member of the American Academy of Arts and Letters.

W. G. HOUSKEEPER, '05

William Gibbons Houskeeper, '05, is a graduate of Course II of the Institute. It is his recent epoch-making invention which led to the production of the world's largest vacuum tube — that which Mr. Houskeeper is shown so tenderly holding in the accompanying picture. This tube was designed for use in trans-Atlantic radio broadcasting in its capacity of supplying 100,000 watts or 200 times the power required for a broadcasting station of 100-mile radius. The essential feature of the new tube for which Mr. Houskeeper is directly responsible, is that the "plate" is a copper cylinder forming the outer wall of the tube. In the customary tubes used in radio sets the "plate" is an actual plate or small cylinder of thin metal enclosed in an evacuated glass tube. If even a small fraction of an ampere is passed through the plate circuit of a small tube, the plate becomes very hot. In larger "power tubes," this heat becomes so great that some means other than radiation must be provided to carry it off. This is easily done if the plate can be made the outer wall of the tube, for it may then be put into a tank of water which circulates through a radiator.

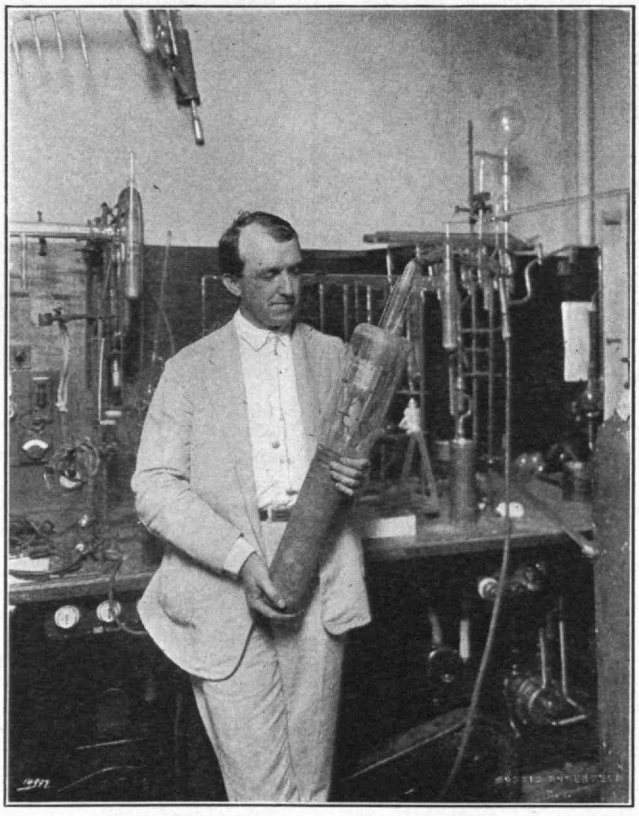
The difficulty, which Mr. Houskeeper earned the credit for overcoming, was to make the whole tube air-tight, and to get the wires for the filament and grid into the tube while keeping them insulated against 20,000 volts. The problem was finally narrowed down to the finding of a way to make an air-tight joint between the heavy copper tube and the glass of the upper part of the tube, and to bring the heavy wires through the glass. Mr. Houskeeper is the first man who discovered a way to seal copper to glass and make an air-tight joint that will not crack within the working temperature.

The tube thus made possible by a Tech man will probably add greatly to the range of radio broadcasting and establish inter-continental radio communication on a basis that has never before been possible.

CABOT, '81, ADAMS, '14, WARNER, '17

The recently-formed National Aeronautical Association in its elections on November 10, landslid for Technology in the first district. The following officers were elected: Porter Adams, Boston, President; Godfrey L. Cabot, Boston, Vice-President; and Clarence M. Knox, Hartford, Secretary. Governors of the districts included Warren Noble, Providence; Edward P. Warner, Boston; H. Terry Morrison, Hartford; E. B. Lyon, Boston; William H. Beardsley, Springfield, Vt., and G. H. Whitemore, Naugatuck, Conn.

Three of these names are those of Technology men. Porter Adams is a member of the Class of 1914 and is at present engaged in experimental engineering in Boston; Godfrey L. Cabot is a member of the Class of '91 and is a manufacturer in Boston and Edward P. Warner is associate professor of aeronautical engineering at the Institute and is a member of the Class of 1917.



William Gibbons Houskeeper II, '05, the father of the giant vacuum tube upon which, in the above picture, he gazes with justifiable paternal pride

WITH THE UNDERGRADUATES

THE COMBINED MUSICAL CLUBS

The Musical Clubs began the season of 1922–23 on October 21. When the first try-outs were held on this day and the next, a total of 180 men appeared for competition. This is the largest number of men that has ever appeared at such first try-outs, and from them the personnel of the Glee, Banjo and Mandolin Clubs are being formed this year. A Jazz Band and various specialty acts are likewise being recruited.

The schedule for the fall of 1922 consists of the usual number of local concerts and the annual fall concert. This latter will be held at Walker Memorial on December first and is the largest concert of the fall term. Local concerts will be held as follows: Franklin Square House, November 14, Wakefield, November 15, Lynn, November 20 and Lowell, December 2. Besides these local concerts, the Clubs will make three trips during the season: a long one during the Christmas vacation and two shorter ones in March and April.

During the winter of 1922–23, the Clubs hope to give a concert in Symphony Hall. No musical activity at the Institute has previously attempted to give a concert of such a size, but the Musical Clubs hope that by giving it, they may, with the support of the Alumni, add considerable prestige to themselves and to the institution they represent.

TOWNSEND LEADS THE CHORAL SOCIETY

It was the year 1922 which marked the establishment of the Choral Society under the financial management of the Combined Musical Clubs. The Choral Society, which is an institution somewhat similar to that under the control of Dr. Archibald T. Davison, at Harvard, has for its aim the cultivation of a taste for good music and the ability to use a voice intelligently. It is under the direction of Mr. Stephen Townsend, a choral director of much distinction.

It was in 1918 that Mr. Townsend conceived the idea of organizing his pupils into a chorus for the purpose of studying and practicing various cantatas. Since 1913, when he became conductor of the Choral and Music Society of Boston, Mr. Townsend has directed numerous vocal societies, including the Boston Symphony Chorus, the Philadelphia Philharmonic Society, the Detroit Symphony Orchestra Chorus and the Chorus of the New York Friends of Music. The establishment of the Choral Society is a move of extreme significance in undergraduate affairs. Its offer to give Technology men, whether of the student body, faculty or alumni, the chance to learn good music, and to help in the singing of it, is one that has met with extreme interest since the foundation of the Society last year, and which doubtless will meet with even more interest as the knowledge of the Society spreads.

Part of the turnout at the All-Technology Smoker, held in Walker Memorial on Friday, October 13, at which some 2000 students were present. This smoker was the first event of the year for the combined student activities of the Institute

THE NEW TECH SHOW AUTHOR

At a smoker held in the East Lounge of Walker Memorial at eight o'clock, on the evening of Wednesday, November 8, the newest addition to the now lengthy line of Tech Show authors was announced. He is Thomas Boeke, member of the class of 1924, and student of Course VI-A. His home is in Hubbard, Iowa.

This first smoker of the year for Tech Show 1923, was held for the benefit of men who will write the music and lyrics for the production. Following precedent, the author of the book has not contributed either. The poetic and harmonic adornments to the Show are the work of different men. Sometimes as many as a dozen contribute to the incidental numbers. A great deal of careful examination and trial is necessary before these numbers are in shape suitable for presentation and, consequently, this smoker is the first one of the year.

The title of the book Boeke has written is "The Sun Temple." Most of the action is laid in Mexico and gives excellent chance for the type of settings, action and music that is known as "colorful." The story concerns a youth who had left Technology, for whatever cause, and had been sent by his family to end his days in obscurity in the oil fields of Mexico. He became involved in trouble and had to flee to the mountains, where he became leader of a bandit troop and was known as "The Red Eagle," a supporter of a rebellion against the government. Hearing that a party of Americans was visiting the town of Solola, he captured the bull fighter who was to appear in the merrymaking and took his place. He was invited to the house where the party was lodged and there fell in love with the daughter of the rich oil owner.

The next day, he captured the party who were on a trip to an Aztec temple, and held them for ransom.

In the evening, he entertained them with dancing and singing. At midnight, spirits of the people who had been sacrificed there, issued from the temple and promenaded. Then priests and Indians of the sun-worshippers aroused the party and selected two who were to be sacrificed at sunrise. A rescuing party arrived just in time to save the victims, and captured the Red Eagle. He was condemned to be shot, but was saved by the arrival of a courier who announced the success of the insurrection against the government. The Red Eagle became engaged to the daughter of the oil owner, and all ends happily, as all has a way of doing in musical comedies.

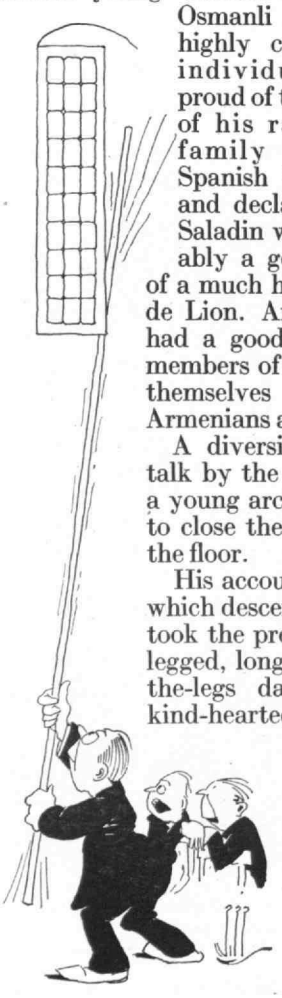
THE INSTITUTE'S RADIO RAISES ITS VOICE

"Word," says *The Tech*, "has been received from station 6ZAC, in Wailuku, Hawaii Islands, that 1XM was heard there at 4:30 o'clock the morning of October 19. 1XM was calling 6ZI, Oakland, Cal., on 500 cycle CW, 6ZAC was using only one stage of amplification when he heard 1XM, but the signals were reported quite audible. This is the second time the M. I. T. Radio Society's station, 1XM, has been heard in the Hawaiian Islands this year.

"The transmitter in use at 1XM the night the signals were heard was using two 50-watt Radiotrons, with five amperes in the antenna and 280 milliamperes on the plates. This is the same power that was being used last April 15, when 1XM was first heard in Hawaii. The signals were much better this last time, however, than they were in April.

AN ARCHITECTURAL SMOKER

On Friday evening, October 27, the students of the Architectural department gave their first Smoker of the school year in the Mediæval Common Room which now graces the site of the old Mining Engineering Laboratory in the basement of Rogers Building. The gathering, which served to welcome the freshmen into the life of the department, was well attended by undergraduates and a number of Alumni, who listened to a talk by C. Howard Walker, a Boston Architect well known as a lecturer. Mr. Walker, a man of distinguished and commanding personality, held the close attention of his audience for over an hour, while he recounted his adventures of over forty years ago in Asia Minor, where he was engaged for about a year and a half as a member of an archæological expedition. In his usual humorous way, he interspersed with his more serious remarks concerning the beauty and historical associations of that region, a number of anecdotes of his experiences with various Greek, Armenian and Turkish characters with whom he had dealings. The general conclusion to be drawn from his references to these people was that the Greeks and Armenians are not all as good as the popular newspaper accounts of their sufferings would lead one to believe, and that the Turks are by no means as bad as they are painted by "hysterical young women missionaries." He found the Osmanli Turk a highly cultured individual, as proud of the honor of his race and family as any Spanish Grandee, and declared that Saladin was probably a gentleman of a much higher type than Richard Cœur de Lion. And for even the Tartar Turk he had a good word, citing instances where members of this meaner race had proved themselves more honorable than both Armenians and Greeks.



A diversion was furnished during his talk by the vain and distracting efforts of a young architect armed with a long pole to close the casement windows high above the floor.

His account of the trials and tribulations which descended upon him when he undertook the protection of an "ordinary, long-legged, long-eared, scrawny, tail-between-the-legs dawg" thrust upon him by a kind-hearted young Englishwoman who was returning to England, was one of the most amusing features of his talk. After the smoker, the usual refreshments prepared by the Co-eds, under the direction of Mr. Jenney, were served.

The affair broke up with a burst into song.

ATHLETICS

FIELD DAY.

Despite the tendency of all events, particularly all athletic ones, to become, in print, "better than ever," it may be said in all soberness that there was seldom a Field Day so interesting as that whose events were run off on the afternoon of Friday, November 3. The sophomores won it, as a lengthening tradition now specifies, and as is probably best for all concerned. But there were, nevertheless, many thrilling moments in the afternoon. The statistics indicate that the freshmen won only one event—the Tug-of-War—but these figures are not able to preserve much of the excitement of the afternoon.

Far and away, the most stimulating event was the Relay race. Eventually, the sophomores won it, but not before the lead had been juggled back and forth several times. When the race was half run, the freshmen had drawn ahead for a wide lead, but the last six men of the sophomore class showed remarkable speed and gameness with the result that the last man overtook his freshman competitor in time to win by a matter of what seemed like inches.

In the football game, the sophomores allowed no freshman score. Having made one touch down, and then missed the goal, they won by a score of 6–0.

In the crew race, there was never a doubt of the finish. The fact of having rowed together for a year on and off proved a heavily weighted advantage, and the sophomore crew finished by a measure of some six lengths.

The following Saturday evening most of the managers and their teams having theoretically recovered from the celebration of the preceding night, the annual banquet for the competitors and officers of Field Day was held in Walker Memorial. Dr. J. A. Rockwell, '96, Chairman of the Advisory Council on Athletics, Prof. George Owen, '94, Dr. Allan W. Rowe, '01, Mr. H. S. Ford, Bursar, Mr. H. E. Lobdell, '17, Assistant Dean, were the speakers. Mr. Lobdell functioned as the presenter of the Cabot Medals—the decorations annually awarded the five men of the sophomore class who have shown the greatest physical improvement during their first year at the Institute. The captain of each team was called upon for a remark or two following the principal speakers. In conclusion, the Field Day Cup, brimmed with cider, was passed around.

CROSS COUNTRY.

The cross country team has been most successful this year. In the first meet, the team defeated Cornell by a score of 51–55. Following this the triangular meet with Dartmouth and Harvard gave Tech another victory. Here the team scored 30 to Dartmouth's 48, and Harvard's 50. Princeton won the second dual race by the score of 26–30. In each of these three meets, Captain Hendrie has placed first. Sanborn has run second twice and third once.

The recent exceptional performances of Hendrie in winning first place while leading his team to victory over Cornell at Ithaca, and over the forces of Harvard and Dartmouth combined, at Belmont, recently, recall the feats of Billy MacMahon, three star wearer of the "T" and one of the best athletes Technology has ever turned out; the man who had the unusual honor of captaining both the Track and Cross Country teams in his final year. Hendrie ran his first varsity race on Billy MacMahon's team when he was still a sophomore. This year, Hendrie gives evidence that he will surpass

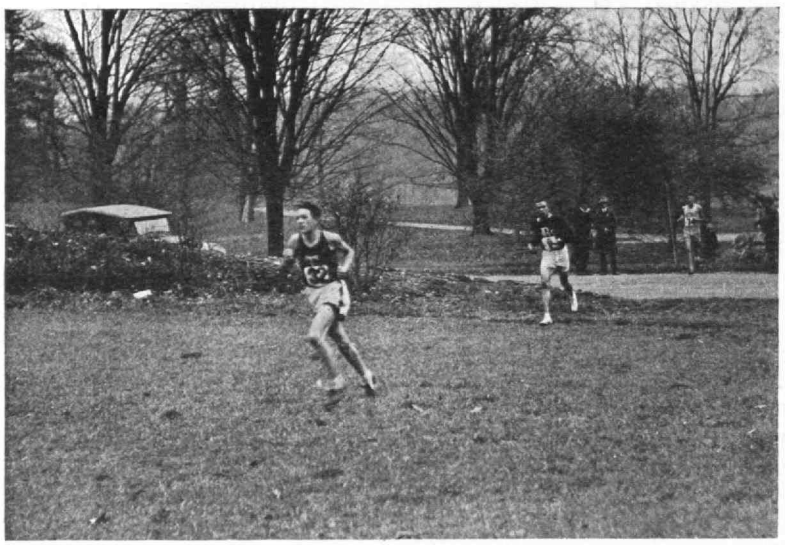
Photos by H. B. Cuthbertson

FIELD DAY, 1922
The Rival Classes enter the Arena

the record of his former captain. His team's victory over Cornell, last year's intercollegiate champions, makes Tech a promising entry for honors in the I. C. A. A. A. A. meet at Van Cortlandt Park, New York. But, whatever his team may do later, Hendrie will always have the honor of being the first captain to defeat a Cornell team on its own grounds, in a good many years. Hendrie's history proves the extent to which he deserves all the honors he has won by his unceasing work of three years. It is hard to imagine that the man who has this year placed first against Cornell, Dartmouth, Harvard and Princeton was hard put to it to make the squad in his freshman year. He had never run before the day he signed up with Coach Kanaly. Only one lesson he knew thoroughly. That was the lesson in gameness.

During the winter of his first year, a freshman team was organized to meet Lowell High School in an indoor track competition on the latter's home floor. The Tech freshmen were told to report to the North Station on the evening of the trip. That night brought forth one of the worst snowstorms in years. Traffic of every kind was tied up, and when Hendrie arrived at the station he found, that with the exception of Charlie Snow, now a varsity half miler, he was the only representative of the team. Trains were not running to Lowell that night, and naturally the meet was never held, but Hendrie was on the job, in case they did. Such is the spirit of the leader of the present Institute harriers.

Probably by the time this number of the Review is issued, Hendrie will be individual New England champion. The annual run of the N. E. I. A. A. at Franklin Park on November 18 at this time looms as an almost certain victory for him.



Hendrie leading Buker of Bates in the New England's last year

BASKETBALL.

The initial basketball practice of the season was held in Walker gym, November 7, when a good-sized squad of veterans reported to Captain Cook. Davidson, Hubbard, Coleman, and Storb of last year's squad were out together with several of the substitutes and some of 1925's squad. No coach has been secured as yet, but negotiations are under way for one, and until one is signed up, Captain Cook will take charge of the practice sessions.

The varsity has a heavy schedule and is planning to get under way with some real work before long.

Later in the season, four class teams will be formed. All men are eligible for these teams except members of the varsity and freshman teams. A series of games will be played between them to decide the class championship.

THE BASKETBALL SCHEDULE

Jan.	6—Northeastern	Away
Jan.	10—Tufts	Home
Jan.	13—New Hampshire State	Away
Jan.	17—Clark	Home
Jan.	20—Williams	Away
Jan.	27—Wesleyan	Home
Feb.	2—Amherst	Away
Feb.	3—Mass. Aggie	Away
Feb.	7—Norwich	Home
Feb.	10—Holy Cross	Home
Feb.	17—Brown	Home
Feb.	21—University of Maine	Home
Feb.	24—Boston College	Home
Feb.	28—Worcester Polytech	Home
Mar.	3—Harvard	Home

GYM.

Opening what looks like a busy season, the Institute gymnasts held their first practice November 6. Coach Hinks, again with the team after a year's lapse, was not present as was planned, to meet the new candidates, about twenty of whom were present.

Captain Thompson, Jack McCoy and Greg Shea, star performers on the rings on last year's team, are back again and are ready to take in more points. Bill Vicinus and Lloyd Littlefield are exercising the horse regularly and Norman Apollonio is preparing to share the honors with Jack McCoy on the parallels. The horizontal bar, always a hard position to fill, has back an old gym man in Way Bailey, but needs more upperclassmen still.

A good schedule of three trips and four home meets has already been arranged and at present is as follows: Trips—Navy at Annapolis, Princeton at Princeton, Dartmouth at Hanover. Home meets—Dual meet with Harvard, dual meet with Yale, Triangular meet with Penn and Harvard, Dual meet with Haverford.

SWIMMING.

Swimming started its winter career November 8, with an opening meeting at which Coach Herb Holm, Captain Stewart and Manager Azel Ames spoke to a group of last year's veterans and candidates for both the Varsity and freshman teams.

Prospects are considered excellent for a successful season his year, since all but three of last winter's aggregation have come back to school. Captain Bert Webber, Bob Purinton and Mart Buerger will be lost to the squad this year, the absence of the latter two leaving the team very weak in the matter of fancy divers,

but last year's freshman squad is expected to make up the loss.

The return of Herb Holm to the position of coach is felt by the management to be another indication of a successful season. Holm, who is considered in official circles as one of the best authorities in New England on water sports, was coach of the Institute team which in the season of 1920–1921 held the New England Intercollegiate Swimming Championship, and his return is hailed as a big advantage to the team.

The starting of the training season now will give the swimmers the advantage of over two months of work before the opening meet with Wesleyan on January 20, and this time should be ample to put them in the best of condition.

THE SWIMMING SCHEDULE

Jan. 20—Wesleyan at Middletown
Jan. 27—Army at West Point
Feb. 3—Amherst at Boston Y. M. C . A.
Feb. 10—Dartmouth at Hanover
Feb. 17—Navy at Annapolis
Feb. 24—Yale at New Haven
Mar. 3—Brown at Boston Y. M. C. A.
Mar. 17—N. E. I. S. A. at Boston Y. M. C. A.
Mar. 24—I. S. A. at Princeton

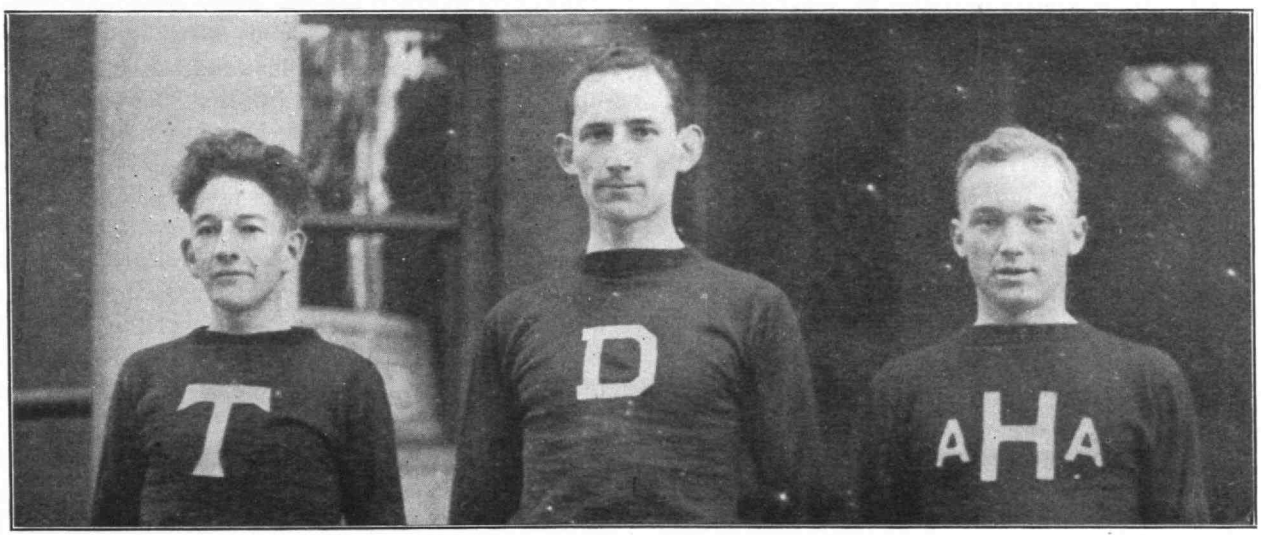
Frank M. Kanaly, Coach of Technology's Track and Cross Country Teams

AS IN DAYS GONE BY

The following from *The Tech* of November 1, may be oddly reminiscent to many of the alumni who read this magazine:

At twelve o'clock today vanishes the last chance for the unsophisticated frosh to escape the rigors and boredom of monkey drill by signing up for an athletic team. Of course the frosh, or at least all those who have never been frosh before, don't know what is in store for them when we speak of monkey drill. They are innocent of the mysteries of the classes in Walker gym which always come at four o'clock on an afternoon when the frosh's first class is *M11* at one o'clock. They are also innocent of the ease with which a deficiency may be acquired in this same monkey drill. All one needs to do is to miss just one performance and he loses the whole show.

"But why all this sad prospect? It is not yet too late. Hesitate not, frosh, but find your way to Coach Kanaly's office and scrawl proudly your name, class (the wherefore of the class numerals is to distinguish those who are new and innocent of impending trouble from the old offenders undergoing second sentence) on one of the little sheets on the left-hand wall. It makes no difference what you sign up for (checkers and chess only are barred) so long as you do it. Track, basketball, boxing, wrestling, etc. (with apologies to all managers whose sport is here neglected), any form of athletics in which an ambitious frosh can prove his tremendous skill. If he hasn't any skill (which Heaven forbid in a frosh of all persons), the coaches will train him to acquire some. Snap into it and get your name on those sheets."



The Three Cross Country Captains — Hendrie, of Technology, Who Won the Triangular Race, Young, of Dartmouth, Who Took Second, and Pratt of Harvard

EDITORIAL COMMENT

The Spoiling of Sport

In the December issue of the *Atlantic Monthly*, Dr. Alexander Meikeljohn, President of Amherst College, made the attempt, in an article titled, "What Are College Games For?" to clear away some of the tangled growth of sophistry which, these days, surrounds all considerations of collegiate athletics. Unfortunately for himself and his cause, Dr. Meikeljohn swung the scythe none too skillfully. The result was, rather than a clearing away, a spreading, of the entanglements. Unfortunately, too, Dr. Meikeljohn scratched himself in the process.

It is hard to approach the intensely complicated problem of how present-day sport should be conducted, and still avoid the accusation of bias. Yet with all recognition of that truth, the words of Dr. Meikeljohn insist upon suggesting that, unwittingly enough, he is championing one dangerous idea and palliating another. The idea which he palliates is possibly debatable to good purpose; that which he champions can easily be the means of bringing joy to the heart of every casuist-reformer of athletics in the country

At one point in his article, Dr. Meikeljohn speaks as follows: "When it appeared, thirty years ago, that our games were arousing public interest and could therefore be made sources of revenue, what did we say? More or less clearly, two statements were made. First, this public interest, though bad for sport is good for other reasons, and must be cultivated. And second, the amounts of money involved are too large to be managed by undergraduates; we must establish Boards of Control to see that proper management is given. And so we took from undergraduates the management of their own games — much to their delight when they saw our more 'efficient' administration." Now it would be all too easy to distort Dr. Meikeljohn's intent by allowing this quotation to go unsupported by the rest of his article. Let us point out, then, in all fairness, that Dr. Meikeljohn speaks of these moves as a 'radical blunder' and says at the end of the paragraph from which the above quotation is taken, ". . . the whole system has become an absurd travesty of the motive from which it sprang." But let us further point out, in all fairness, that Dr. Meikeljohn has previously nullified most of this by saying, "I doubt very much whether the younger generation in the same situation would have done any better with it than we have done."

It is hard to understand the basis of Dr. Meikeljohn's doubt. Offhand, we know of only one institution where the younger generation has had a fair show at running its own affairs and at that institution — our own, we are proud to point out — the innovation has proved a remarkable success. It is foolish for Dr. Meikeljohn to say that public interest is bad for sport, or that, as in another paragraph, "If the games were not public spectacles we could have better sport, more fun, better sportsmanship." This is comparable to saying that the theatre-going public is to blame for the commercialization of the drama, and that the formation of the old-time Syndicate was due to the impossibility of keeping people out of playhouses. Football would not be more fun if it were played to a restricted audience, any more than a play would inspire its actors more deeply if played behind a curtain that never went up. The public interest, the enthusiasm, the songs, the cheers, are the inspirational qualities in present-day sport, and have nothing to do with its degradation — save that they have caused a number of more or less unscrupulous gentlemen to reflect on how pleasant to the senses it would be were these songs and cheers directed to their own side always, and away from their opponents. Undergraduates are not at all insensible to the warming quality of these acclamations, but undergraduates, left to their own devices, lack the resources to purchase them. The collective riches of many an institution and its alumni body have destroyed the impromptu spirit of undergraduate sport. Alumni and institutional support of undergraduate athletic competition is vitally necessary to the extent that it renders competition possible under conditions that are healthy, pleasurable and profitable; but when alumni go beyond the unselfish donation of funds, and insist upon manipulating affairs so that they may obtain the artificial exhilaration of victory as often as possible, they are viciously perverting the ends of true sport. Dr. Meikeljohn would be the first to admit this, but he falls into error when he says, in effect first, "It would be better if the public were not interested," and later, "It is doubtful if the undergraduates could have done better by themselves." Dr. Meikeljohn would see two very radical and diverse changes take place in college sport if he could see either of his statements tested.

The second point at which Dr. Meikeljohn falls into error is far more serious. It illustrates how easily possible is the corruption, not of the alumni but of the faculty, by the thirst for victory. We must here quote a whole paragraph:

"As to the prospect of improvement here, there is

some reason for encouragement. The suggestion that no one be allowed to coach unless he be a member of the faculty is being very favorably considered. It is perhaps somewhat invidious to suggest that the first step toward nonexistence is membership in a faculty. But at least the suggestion does mean that we are considering the problem. My own impression is that the days of double-mindedness are going by."

This can only lead one to imagine that if our days of double-mindedness are going by, they are to be succeeded by days of *n*-mindedness, where *n* is any assignable number larger than two. Dr. Meikeljohn is only too right when he says that the suggestion is being very favorably considered. The trouble is that the hopeful tone in which he says this implies his forgetfulness that any prize fighter can be made a faculty member by the simple process of a majority vote — and that a number of them already have been. We are afraid that Dr. Meikeljohn has here unconsciously supplied the best of material for specious debate of "faculty control of athletics." There are some men who are coaches because they are faculty members, but there are many others who are faculty members because they are coaches. Many of our institutions of higher learning have a "Professor of Football Coaching" and "Professor of Track Coaching." In this world there are many honorable bootblacks who would renounce forever their assumption of the title Professor, did they but know this.

No one can deplore such a state of affairs more than, we are certain, Dr. Meikeljohn does. For this very reason it is most regrettable that he has seemed to gesture at it with a whitewash brush.

The "Nut Tests"

Psychological examinations have come and gone. This experience which Technology has just passed through for the first time, is still too recent for detailed comment in the Review. Without knowing what the results were, it is still perfectly safe to say that they were interesting.

On November 8, the freshman class assembled in one of the large drawing rooms and submitted itself to the indignity of being asked to determine whether Clemenceau was a great polo-player actor-scientist statesman or theologian. Prof. Charles L. Stone, of Dartmouth, was in charge of the proceedings. Fortunately for Technology, and fortunately for the reputation of the psychological tests in general, Professor Stone is not a man who believes in the indiscriminate application of the army tests to civil life. Yerkes and Yoacum, the originators of the army tests, in an early phase of their development, widely spread the caution that an unintelligent or unthinking use of these tests could be dangerously misleading. Lately the *New Republic* has been publishing a series of articles by Walter Lippmann, in which he has done his best to undermine the popular and undiscriminating credulity with which some behold these tests. For a certain set of circumstances and a certain set of individuals they are excellent, but it is quite obvious that because of their necessarily relative character, the more widely the significance of these tests is extended, the less significant they really become. Professor Stone did not approach his problem at Technology with the attitude that the tests would definitely settle the problem of what percentage of the Institute were mentally gifted and what percentage were—to use the widely, and all too, popular word—morons. The test was given merely to furnish another, and possibly a suggestive lead, to the quality of a student's mind as balanced against some other students' minds. It is easy to say that the test revealed some startling and some amusing things.

A Meeting in New York

A coming event, which is already casting a large shadow before it, is the meeting on December 15 and 16, in New York, at which the Technology Club of New York will be the host to the Technology Clubs Associated and the Alumni Association at large, at a convention held with the avowed purpose — an admirable one — of "getting behind President Stratton." There is much to look forward to in this meeting and foremost about it is the declaration made by the officers in charge that no advance attempt is to be made to drag information on policies and programs out of Dr. Stratton. The meeting is simply and solely a gathering that will meet and voice a lusty vote of confidence in Technology's new leader.

By all accounts, it will be a meeting of wise men. The buttonholing of a president begins all too soon after his election in any event. It is pleasant to be able to record the fact that it will emphatically not begin on December 15 and 16. Dr. Stratton, one may be sure, has already plans, programs, hopes and ambitions, for Technology, but it would be impossible to expect them to be at the present time anything but shadowy and vague. It is thoughtful and courteous to announce in advance that there is to be no request for a statement of policy or a plan of action. The meeting in New York takes on unusual interest when one thinks of the numbers that will attend it and when one thinks, too, of the hearty note of loyalty which will be sounded there.

BOOKS

The New Heavens

by George Ellery Hale, '90, VIII, Director of the Mount Wilson Observatory of the Carnegie Institution of Washington, pp. 88, $1.50. New York: Charles Scribner's Sons.

We are in danger of forgetting, since we moved across the river, how close has been the past relationship between the Institute and the advancement of Astronomy and its coadjutory sciences in America. Since we moved across the river, I say, for in old Rogers during the latter years there were always, on exhibition in the corridors, interesting reminders that Technology had at least a stake in what seems to the layman perhaps the purest of pure sciences. Those frames of colored photographs on glass lighted from behind by electricity were a constant reminder to the hurrying undergraduate of the latest discoveries being made at the observatory in Flagstaff, Arizona, by a member of the Institute faculty, Dr. Percival Lowell. In 1916, Professor Lowell died and the Institute moved; but we still have Dr. Hale at Mount Wilson, and an occasional revival of Professor Lowell's generous custom would seem not out of place even in the new Technology.

But the Institute's connection with astronomy is older still. We cannot forget that the first professor of Physics to succeed William Barton Rogers was Edward C. Pickering, who served Technology from 1867 to 1877, in which time he organized the experimental teaching of Physics in the laboratory in such a thorough and complete way as to mark an epoch in scientific education. In 1877, he became director of the Harvard College Astronomical Observatory, where until his death in 1919 he was one of the recognized leading astronomers in the world.

He was followed, so far as the Institute was concerned, by Percival Lowell, member of the Corporation, who founded the observatory at Flagstaff, Arizona, and in 1902 was appointed non-resident professor of Astronomy. He not only put the research facilities of his observatory at the service of the Institute but, by his notable Lowell lectures in 1906, and a short course in astronomy for Tech men during the same year, he served further to link Technology in the public mind with the study of astronomy. He was known primarily, of course, for his long study of the planet Mars and the controversies raised by his famous hypotheses regarding its canals as evidences of intelligent life.

The third in succession is the author of this little book, *The New Heavens*, Dr. George Ellery Hale, a graduate of course VIII in 1890, for many years director of the solar Observatory at Mount Wilson, California, under the control of the Carnegie Institution of Washington. His ability as a scientist was recognized as early as 1894 by the award of the Jansen Medal of the Paris Academy of Science. This was followed by the Rumford and Draper medals in 1902 and 1903, the gold medal of the Royal Astronomical Society of England in 1904, and in 1921 the exceptionally distinguished Actonian Prize of the Royal Institution of Great Britain for his work in Solar Physics, as well as several other medals from other societies and honorary degrees from eleven leading universities of the world.

In the years before the United States entered the war, he was influential in helping to put this country, as well as the Institute itself, on a preparedness basis. He did much to organize Technology for the research it was able to do during the war, but, more important, he became chairman of the Division of Foreign Relations on the National Research Council, established largely through his efforts before we actually entered the war and, eventually, the member for the United States on the executive committee of the International Research Council, which functioned so successfully throughout the remainder of the war.

To his wide and intensive knowledge of modern science, which made him the one right man for these positions, this little book is to the layman a compelling witness. As the non-scientific reader, for whom it was written, turns over its concise and lucid pages, reviewing the recent enormous progress in astronomy, and realizes, more than ever, how interdependent that science is with physics and chemistry, it seems a far cry back to the year 1843 when the cornerstone of the first astronomical observatory in the United States was laid at Cincinnati with an address by John Quincy Adams who, although aged and suffering from serious illness, traveled through many hardships in the early winter to bear his testimony of the value of pure science to the government and people of the United States.

The progress of Astronomy and its allied sciences during a scant century since, is to be measured most interestingly in the pages of Dr. Hale's book. It is not written for astronomers or other scientists; neither is it written for the mere newspaper reader to whom the vocabulary of science is as Chaldean. But any Institute graduate who has kept eyes and ears open and mind alert, so as to have picked up a little knowledge of general science while pursuing his professional course, will obtain here, in a compact volume of less than a hundred pages, a clear and stimulating idea of the fundamentals, mathematical and physical, of modern astronomy since Copernicus, with particular emphasis on the astro-physical research of later years.

Illustrated with over forty beautiful plates from star photographs bearing directly on the text, the volume concerns itself, after the brief historical summary, with a clear description of how our knowledge of the universe has widened in proportion to the power of our instruments. This is illustrated with a fascinating account of the design and construction of the new one hundred-inch Hooker reflecting telescope which, though begun in 1906, has been in successful operation at Mount Wilson only since peace left the observatory once more free for purely astronomical work. This section is illustrated in great detail from pictures of the structure of the telescope while building and in place.

The second chapter deals with the successful measurement, for the first time, of the actual diameters of the giant stars Betelgeuse, Arcturus and Aldebaran by

means of Professor Michelson's 20-foot "interferometer" which eliminated the "light fringes" from the stars. This is one of many examples of ways in which physics has solved astronomical problems otherwise apparently insoluble.

The last, and perhaps most interesting section called Cosmic Crucibles, tells the story of the discovery of the gas helium and the clue it gave to the old, puzzling question of the constitution of matter and the transmutation of elements. No less interesting is Dr. Hale's account in this chapter of the researches in physics in which the spectroscope seems to prove that sunspots are, in reality, magnetic fields. Other sections treat of solar chemistry, of the astro-physical basis of the Einstein theory, and of the organization of modern astro-physical science to solve one of the oldest and most fascinating scientific puzzles in the world—the transmutation of the elements.

At the end of his book, Dr. Hale utters a word of explanation and warning to the business man who pooh-poohs at pure science, using the past work of the astronomer and physicist as examples.

—*R. E. Rogers*

Admirals of the Caribbean

F. R. Hart, F. R. G. S., 203 pp., Houghton Mifflin Company, 1922

In this volume, Mr. Hart, of the Executive Committee of the Institute Corporation, has gathered five biographical studies: of Queen Bess's Drake; of Morgan the Buccaneer; of de Pointis and duCasse; of Vernon, — "old Grog," for whom Lawrence Washington named his estate; and of Rodney: to these he prefixes a chapter on the exploration of the Caribbean. The essay on Morgan is some sixty, on Rodney some thirty, on the others some twenty pages each. There are interesting illustrations from old portraits, books, and maps, and a meager index.

Mr. Hart from early business connection with Central America has long been interested in the "admirals of the Caribbean," the succession of commanders, Spanish, French, and English, whose exploits made the naval history of our tropical waters. One wonders why he should not add Admirals Sampson and Schley and the later story of "our Sea," *mare nostrum*. Though one may feel no more pride than does the present reviewer in that shabby and unnecessary war, yet the naval conflicts of 1898 are of the greatest interest, and not discreditable, as were the political and diplomatic preliminaries, to American honor. Suggestive comparison seems possible between the naval problems of the Revolutionary period and our own, particularly in the matter of attacks on fortified harbors: such comparative comment is what the reader most wishes Mr. Hart had made room for.

For the Caribbean, doubly since the canal opened, makes vivid appeal to the historic imagination as *mare nostrum*. For Hellenic antiquity the Eastern Mediterranean was the focus of civilization, because "men tend," as was noted by the omnicompetent mind of Plato, "to establish themselves on the shore of the sea, like frogs on the edges of a pond." The rise of Rome expanded that area to the whole Mediterranean, and the great Latin sea remained the focus of European civilization until the westward voyagers made it only a vast backwater of the larger Atlantic. In the earlier history of our hemisphere the Caribbean played a rôle which offers interesting parallels, as the center of pre-Columbian culture and of the earliest Spanish empire. These parallels the reader wishes Mr. Hart had developed: what considerations have made our circle of waters, shared between Saxon and Latin culture, less significant; what of its future; must it, because by ten degrees of latitude more tropical, never become so significant, or will the white man's increasing control of the tropics make the Caribbean gradually more central in the history of the American continents? The first chapter and the sketch of Drake re-present material already available; we should rather have a discussion of the historical geography of those waters, of the economic, political, and strategic forces of the conflict that was worked out in the undertakings these men conducted, — chapters, i.e., comparable with Mahan's brilliant essay on the strategy of the Caribbean, — chapters which Mr. Hart's long knowledge of the commercial and economic relations of the Caribbean surely equip him to write. Toward such a more extended and more philosophical history these biographies are essential preliminaries, — all readable, some pretty nearly thrilling, several important as providing source material scarcely elsewhere available. (Reviewers have so charming a way of suggesting wonderful books an author might have written had he undertaken something other than the book under review!)

It is a pity that the publishers in producing a volume so beautiful typographically should not have lived up to their repute for impeccable proof reading. Spellings and accents in the foreign words are erratically variant.

—*H. L. Seaver*

NEWS FROM THE ALUMNI ASSOCIATIONS

TECHNOLOGY CLUB OF CHICAGO

October has been a month of considerable activity for Tech men in Chicago. The election of Dr. Stratton has been a source of great satisfaction to all of us. The Corporation has certainly found a scientist and executive fully able to handle the problems at the Institute and to carry forward the great work which Dr. Maclaurin so brilliantly initiated, materialized and advanced. May Technology under Stratton attain still higher honors in the service of Education and Science!

The fact that Dr. Stratton was born in Illinois, graduated from the University of Illinois, and was for many years a member of the faculty of Chicago University, has made his election one of added interest to the Technology Club of Chicago. At our lunch on October 17, the club had the pleasure of hearing about Dr. Stratton from one of our members, Samuel D. Flood, '90, who knew him at the time of the Spanish-American War when Dr. Stratton was one of the officers in the Naval Militia. Flood in his remarks, called attention to Dr. Stratton's ability at that time to get what he went after and cited his winning the prize drill in competition before the then Assistant Secretary of the Navy, Theodore Roosevelt. Those who have witnessed the growth of the Bureau of Standards at Washington can well testify to Dr. Stratton's great success as a "Go-getter." Needless to remark that our lunch on the seventeenth was particularly well attended, since it was advertised that there would be a talk about Dr. Stratton by one who knew him.

Our Fall Smoker, held Thursday evening, October 26, at the Engineers Club, was very well attended and thanks to Kelley, '22, chairman of the committee on arrangements and the jazz orchestra of Farrand, '21, Maltby, '22, J. O. Merrill, '19, and E. A. Merrill, '22, the affair was thoroughly enjoyed. Sixty-five turned out to see each other and to get acquainted with the new members of whom there were fifteen from the Class of '22. The baby class showed lots of pep, as well as money, besides, since they have not only the best record for attendance but also for the payment of dues, an item of much importance when it comes to paying for the postage stamps which all class and club secretaries fully appreciate.

Dean Hayford, head of the Engineering School of Northwestern University, gave us a very interesting talk on the Great Lakes, with particular reference to the great effect on their level by the wind and barometric conditions. This question has a very important bearing on the flow of water which Chicago should be permitted to take from Lake Michigan for use in the Chicago Drainage Canal. Blunt, '74, who is the assistant engineer here for the United States Army, related several interesting experiences which he had on the Lakes during heavy storms and high winds.

Jones, '05, who has long been famed for his stunts, gave a particularly good exhibition of slight of hand tricks. George even performed the old egg trick and produced three from Charlie Rodger's, '05, mouth. While we knew Charlie to be quite able to talk, we never realized that he had such a big mouth.

Our convictions about the choice of Dr. Stratton were made considerably stronger by the account which Dean Hayford gave of him. Professor Hayford has been very closely associated with Dr. Stratton for the past twenty years and is at the present time a fellow member of the National Advisory Council on Aeronautics and, of course, could and did speak with authority. Moreover, we had the added pleasure of a long distance phone message from Washington. Dr. Stratton said in part:

"I have no definite plans for the future. I am now devoting a great deal of my time to the careful study of the needs of the Massachusetts Institute of Technology, and especially as to how I can be of assistance. My past twenty years have been spent in direct contact with the engineering interests of the country. I have known well the great work and the honors which have come to the Massachusetts Institute of Technology; its world-wide reputation and especially its opportunities for good work. Its graduates all over the World are found in the most important positions. From letters which I have received, I am going to have their support.

"When I take up the work at the first of the year, I want to get into close touch with the Alumni. I will be glad, if conditions permit, to accept your invitation to your Annual Dinner." (We extended to Dr. Stratton our invitation to our Annual Dinner which is held during April.)

It had been hoped that arrangements could have been made to have Dr. Stratton broadcast his talk by wireless from Schenectady or from some other suitable point and thus permit its reception by the other clubs between here and Boston. Our smoker was scheduled too soon after the announcement of Dr. Stratton's election to permit of the making of the necessary arrangements. Possibly one of the more eastern clubs can arrange this later on in the year when all of the clubs can have a joint smoker.

Through the courtesy of our old Secretary, Tomlinson, '12, of Musical Club fame, we had a very fine time enjoying the film of the class day exercises of last June. We didn't see the tent collapse, but did see the senior picnic stunts at Nantasket, which were especially good. Some of them gave George Jones new ideas.

Our lunches continue to be popular. Every Tech man is cordially invited to visit us when in Chicago, Tuesdays, at twelve thirty, in the Engineers Club, 314 Federal Street.

Robert W. Weeks, '13, *Secretary-Treasurer.*
811 Washington Street, Evanston, Ill.

NEW HAVEN COUNTY TECHNOLOGY CLUB

The opening meeting of the Tech season in New Haven County was held Saturday evening, October 21,

at the laboratories of the Kolynos Company in New Haven. It was an unusually fine meeting in many respects.

Through the hospitality of the Kolynos Company their entire plant was opened for inspection and every convenience of an up-to-date modern industrial organization was at the disposal of the club. Dinner was served in their dining room. Then followed a business meeting in the director's room where the annual election of officers was staged under the direction of President John C. Bradley, '07, a tradition famous in the history of the club.

The success of the act was due to one Johnny Leathers, '14, otherwise known as "Wee War" for his ingenious construction of the Australian Ballot Box, and to one Charlie Haynes, the Caruso of Connecticut, whose particular interest in the occasion will be subsequently understood. For the benefit of our readers who could not attend, the ballot box must be described, that they may fully appreciate the situation.

In the center of the long mahogany director's table covered with a black silk cloth reposed the famous ballot box. In due course of time, Charlie Haynes proceeded to unveil the instrument with all pomp and ceremony and explanation.

There, eyes beheld a large gray box with red trimmings, suitably incumbered with gears, cranks and cams! Dials, indicators and steam gages ranging from "Repeat" to "2000 lbs." bristled at strategic points. A large hopper surmounted the top of the box for depositing the tons of ballots required to properly elect the new officers. All was proceeding merrily when Herby Wilcox moved to have the Secretary cast the ballots, which was duly seconded and so voted. The Secretary cast the ballots! Setting the dials on the required number of votes necessary to elect, and waiting until the pressure gage slowly mounted to 1999 lbs. per square inch, the ballots were cast. Seven turns of the operating crank and the electric contacts were made. The lights burst into a bright red glare and the gong loudly proclaimed the election. The results of which are made public as follows:

President, Charles R. Haynes, '04; Vice-President, Arthur C. Jewett, '01; Secretary, Roy L. Parsell, '14.

Following this business meeting, an inspection was made of the laboratories, equipment and methods of making this world-wide dental cream. This tour was conducted by Chester Dunlap, '11, assistant manager of the Kolynos Company, assisted by members of his staff. The building is a modern reinforced concrete structure, five stories high, architecturally treated to harmonize with the residential community in which it is situated. The business offices are on the first floor with the main assembling and packing just above. The chemical and bacteriological laboratories, for testing and research, are models of cleanliness; in fact, so is the entire plant.

Raw materials are conveyed by elevator from the receiving station on the first floor rear to the storerooms on the fifth floor. From here, they pass by gravity to the floor below for mixing as required. Automatic scales electrically controlled weigh out the different ingredients into the mixers in one-ton batches. The resulting cream is handled by a screw conveyor and pumped into glass-lined storage tanks. From these tanks, it is forced by air pressure to the automatic tube filling machines on the second floor. Here a single machine can fill 500 tubes per minute. Tubes are packed in paper cartons and then into wooden shipping cases in twenty-two different languages and shipped to seventy-seven countries throughout the world. The efficiency of the organization and management is briefly described as follows: During the war with the advance of wages of 300 per cent., the unit labor cost per gross decreased 40 per cent. and is still going downward. The Kolynos Company has recently established a duplicate plant in London.

During the tour, a short moving picture entertainment was given by the Winchester films, showing how the famous Winchester Rifles and Shotguns were manufactured.

Roy L. Parsell, *Secretary*, 235 Park St., New Haven, Conn.

THE TECHNOLOGY CLUB OF NEW YORK

The Technology Club of New York, drowsily pursuing the even tenor of its ways with dignity and sedateness, awoke with a start on the morning of October 30. There was something in the air, an unwonted stir in the quiet corridors of the clubhouse which seemed to be an omen of an approaching event. Suddenly the club realized that it was about to have a Hallowe'en party. It shook off its shackles of composure, and hastily clothing itself in the orange colors of the day, prepared to renew its youth. By 8:30 p.m. nearly a hundred members had arrived and the party was off. The first events were entirely athletic, the most gruelling being the string and doughnut contests in which the doughnut was tied in the middle and an engineer was placed at each end of the string with instructions to get to the doughnut as quickly as possible without using his hands or feet. The voracious and speedy manner in which certain contestants gobbled up their string and reached the doughnut, gave an inkling of why the restaurant has been losing money. At 9:15 the real show started and Messrs. Warrender, Parsons, Chamberlain, Wiggs, Carven and Robeson kept the audience in an uproar for an hour with astonishing card tricks, astounding cartoons, audacious stories and æsthetic (?) dancing, not to mention the hit of the evening—Mr. Gallagher and Mrs. Sheen as sung by Messrs. Carven and Robeson. After this, the audience adjourned to the Stein Room where the bartenders served cider and punch, and a free lunch was spread on the tables.

The survivors of the memorable occasion claim that they continued to enjoy themselves more and more as the evening wore on, but the fact remains that on the following morning the club had taken on again its somewhat austere countenance and had regained its normal dignity and composure. But even now, as members gather in groups about the fireside, the story is retold of how the club renewed its youth on Hallowe'en and there are whispered prophesies that it will happen soon again. All credit to Messrs. Gibbs, Piza and Carven, the Hallowe'en Committee.

R. H. Scannell, *Secretary*, 17 Gramercy Park, New York.

TECHNOLOGY CLUB OF EASTERN NEW YORK

At a meeting of the Technology Club of Eastern New York held on September 6, the following officers were elected:

President, E. D. Harrington, '19; Vice-President, P. L. Alger, '15; Secretary-Treasurer, E. D. Ryer, '20.

At the first regular luncheon thereafter, held on October 19, Gerard Swope, '95, President of the General Electric Company, was our guest and favored

us with a short address, after which there was a general discussion. There were forty-six members of the Club present at this luncheon, including five of our past "coeds." We feel that we have made a very successful start this season and hope to have as much interest shown at our future meetings as at the last one.

At our next luncheon, which is to be held in the middle of November, we expect to have Dr. Charles P. Steinmetz, chief consulting engineer of the General Electric Company as our guest.

Later in the season, we hope to arrange some evening meetings in Albany and Schenectady so that those of our members who do not find it possible to attend our monthly luncheons can be present.

E. D. Ryer, *Secretary*, 419 Union St., Schenectady, N. Y.

DETROIT TECHNOLOGY ASSOCIATION

Detroit Technology Club started its winter season in great style on Friday night, October 20, with a real bowling party at the Detroit Athletic Club. A good sized crowd turned out and some very poor scores were made. All alibis were forgotten later, though, when the Club ushered its members into another one of their inimitable midnight luncheons.

Friday has become the meeting day, both at noon at the Board of Commerce on the first Friday of the month, and at night on the third Friday of the month, probably at the Detroit Athletic Club.

P. C. Baker, *Secretary*, 768 Penobscot Bldg., Detroit, Mich.

THE TECHNOLOGY CLUB OF ROCHESTER

The continued stormy and desolate weather threatened to spoil the picnic of the Rochester Technology Club; but, happily, the sixteenth of September dawned as chaste and beautiful a day as ever lured the sons of M. I. T. out under the open skies amid the glory of autumn in the fertile Genesee country. Two o'clock saw the Club members assembled for the drive up the valley and before three o'clock the pasture below the Red-Jacket Inn at Scottsville was a swarming baseball diamond, where the odd-year classes, captained by Virgil M. Palmer, '03, grappled furiously and successfully with the even years under Captain F. L. Higgins, '04, Score 11 to 7. Leaders of industry acquired the "pep" of the youths of '22 and crutches were no handicap for the routers on the side lines, drawn into the fray by the irresistible impulse, — witness Chas. F. Wray, '95, though temporarily maimed in limb, perfectly intact in Tech spirit. Fortunately, the routing, the laughter and the language made no lasting impression upon the reams of motion picture film with which one of our boys from the Eastman Kodak Company experimented upon us in connection with a new camera now being developed for the market.

The real hero of the day was H. H. Tozier, '96, chairman of sports and stunts, assisted by H. L. Smith, '18, and E. S. Farrow, '21, as they promptly convinced us in the long and merry orgy of games held in the grove and on the beautiful greensward of the Inn, overlooking the valley — equilibrium races, cigarette-lighting races, time races (for which crutches were no handicap) quoits, putting, shooting. But, oh, the forty-two appetites that finally sat down to the chicken dinner! What destruction they wrought. Meanwhile, three of our new quartette members (Messrs W. J. Edmonds, Young and Harris) led the singing for the first time and stirred the whole assemblage to enthusiasm. Then somebody called for speeches from the ten newly-initiated 1922 men, and, by jolly, every one of them was a model of good taste and good fellowship, though, of course, we knew that they flattered us a wee bit about the good reputation of the Rochester Club back at the Institute. Also, we wanted to hear from O. K. Foote, '80, our oldest member and then we must needs witness with envy the award of the stunt prizes by Tozier and we had perforce to endure a few puns and sorties of wit from our president, despite open protest. He released us at last to the big, cozy living room of the Inn, where the crackle of the back log cheered us into rippling laughter and mellow reminiscent song around the great piano, until we voted this our acme of events and reluctantly, when the hour for departure came, broke away, furled the Tech banner that hung from the portal of the Inn during our stay, a symbol of royal occupancy, and sped on our long drive home.

G. T. Lane, *Secretary*.

TECHNOLOGY CLUB OF RHODE ISLAND

The first Fall Meeting of the Technology Club of Rhode Island consisted of a banquet at the Turks Head Club. The period from 6:00 to 6:30 was devoted to a "get-together smoker," after which the forty-two members present sat down to a delectable banquet. After several songs, the business meeting was opened and the Secretary's minutes of the previous meeting were read and approved.

The Providence Engineering Society invited us to affiliate and it was moved at this meeting that a committee be appointed to confer with them relative to their invitation.

Mr. Lawrence B. Davis and Moses J. Look were elected to membership in the club.

President Morey, acting as toastmaster, urged the members to support the Club and Technology Institutions for the coming year. He asked for a gathering of more Technology men into the membership of the Club and then introduced Mr. Harold E. Lobdell, '17, Assistant Dean, who spoke at length on the new courses established at the Institute and the research work now being done in photo-elasticity and other lines. He described the healthy condition of the undergraduate publications and gave statistics showing their high standing in the college world. Mr. Lobdell was concerned with much of the publicity work attached to Dr. Stratton's appointment and was thus able to give an interesting and complete sketch of the new President.

The other speaker was Dr. Allan Winter Rowe, '01, one of the Alumni Athletic Advisors who spoke of the rapid strides Crew is making and the large number of men now taking advantage of the opportunities so generously provided by the Corporation. Over two hundred men are now using the new Boat House, including eight freshman crews competing for the honor of representing their class at Field Day. The meeting adjourned at 9:45 with the singing of the Stein Song.

Dick Dickerman and Les Fletcher provided a very attractive meeting, showing the result of much labor and receiving the grateful appreciation of the Club. Their plans for next month consists of a County Fair where red lemonade and wicked gambling devices will strive to entertain the members.

Norris G. Abbott, Jr., *Secretary-Treasurer*, 107 Providence Street, Providence, R. I.

NEWS FROM THE CLASSES

News from Class Secretaries is now put forth under a new system. News from even-numbered classes is published in issues dated November, January, March and May. News from odd-numbered classes is published in issues dated December, February, April and July. The only exceptions to this rule are those classes whose secretaries have volunteered and guaranteed to have their notes appear in every issue.

1877

RICHARD A. HALE, *Secretary*, Essex Co., Lawrence, Mass.

The Secretary regrets to announce the death of William A. Burnham who was connected with the Class of '77, M. I. T., in the Department of Architecture in 1875 for a short period. He died in New York, Oct. 18, 1922, and the following sketch of his life appears in the *Boston Transcript*. Owing to his short connection with the Institute, he felt that he had no very strong affiliations and was not very active in the Class Association, and was not, in general, remembered by many in the class. He was, however, active in general business life and will be a loss to the community where he resided.

"William Appleton Burnham, who for many years had been identified with Boston, died Oct. 18, 1922 in New York, where his home was at 4 West Fifty-third Street. He returned four days ago from a brief stay in a hospital, due to an injury to his foot. He was stopping at the Plaza Hotel until his house was made ready for occupancy.

"Mr. Burnham was born in Boston, Feb. 17, 1852, and was the son of John Appleton and Jane Isabelle (Denison) Burnham. He spent one year at the Harvard Law School, and then took a course in architecture at the Massachusetts Institute of Technology. In August, 1876, he went to Europe to continue his studies in architecture, and in May, 1877, he passed the entrance examinations to the Ecole Nationale des Beaux Arts. He returned to Boston, where he resided at 87 Beacon Street, and opened offices at 4 Post Office Square, where, in conjunction with others, he had charge of the family estate.

"Mr. Burnham's first wife was Miss Alice Munroe, whom he married in Paris, France, June 4, 1879. She was the daughter of John Munroe, a Paris banker. She died in September, 1914. Subsequently, Mr. Burnham married Mrs. William Manice (Sarah Ramsen) of New York. She survives him as do three children by the first wife, William A. Burnham, Jr., of Colchester Street, Brookline, who married Miss Alice Boit; Frederic M. Burnham of Manchester, who married Rosamond Eliot; and Mrs. Austen Gray (Alice M. Burnham) of New York. There is also a surviving brother, Henry D. Burnham of 96 Beacon Street.

"Mr. Burnham was a member of the Somerset Club, the Myopia Hunt of Hamilton, the Eastern Yacht Club of Marblehead, and the Knickerbocker and the University Clubs, both of New York."

1881

FRANK H. BRIGGS, *Secretary*, Hotel Puritan, Boston, Mass.

James Lund died on September 29.

Since his graduation he has been connected with the Merrimac Chemical Co. and by various successive promotions, he was elected about a year ago to the position of vice-president and general manager of all the Works. He was always faithful and an assiduous worker, and attentive to the interests of the company he was with.

He leaves a wife and one son, James Lund, Jr., who was in service in the World War.

His death removes one more from the list of living graduates, now numbering only eighteen.

Bill Rosing writes under date of July 15, 1922, from Biloxi, Miss., as follows:

"After closing up some war contracts at the Globe Seamless Steel Tubes Co., I returned to St. Louis and entered on some special work for Gulf Coast Line of R.R.'s, making specifications for locomotives and cars, and after contracts were let, took charge of their construction. The whole work was from about April, 1920, to the latter part of 1921 when I came here.

"I had purchased some property here several years ago, intending to build and locate here. I finished and moved into my new home in March, 1922, and am now giving the new life a trial to decide whether or not this will be my permanent home. I have entirely retired from business and unless something unforeseen occurs, will remain so.

"I don't suppose I would know which way to town if I were to land in Boston again. My last visit was in 1886 for only two days and quite a number of changes had then taken place."

1883

HARVEY S. CHASE, *Secretary*, 84 State St., Boston, Mass.

THREE POEMS

Inconsequent.

When a Flapper
Is too flipper
Should you slap her
With a slipper?
Should you slam her
With a hammer
Or should you damn her?

In the Nude

Each surgeon's patient has a scar
And shows it off with much éclat.
From little ones like tonsilitis
To really swell — appendicitis!

At Camp

If the near-cook burns her biscuit
Should you biff her in the brisket?
Should you thump her in the jumper
Or should you bump her?

1885

I. W. LITCHFIELD, *Secretary*, 10 Kenmore St., Boston, Mass.

Miss Azva Stacy Brown, daughter of Mr. and Mrs. Charles A. Brown, was married at Salem, Mass., to Donald Tucker Hood, son of Mr. and Mrs. Frederick C. Hood of Brookline, on October 14.

A letter was received this fall from Dane Baker, manager of the Broken Hill Proprietary Companies, iron and steel properties, Newcastle, N. S. W., in part as follows: "I was very sorry to hear of the death of Billy Spalding, from your circular which has just come to hand. I am sure that when I meet you all again, there is no person whose presence I shall miss more than that of Billy Spalding." He also sent a copy of a paper by him, read before the American Iron and Steel Institute at New York, May 26, on The Development of the Iron and Steel Industry of Australia.

The *Boston Globe*, August 25, has a column interview with Charley Eaton, headed: "New Triumvirate seen Ruling World — C. W. Eaton, M. I. T.,'85, back from Globe Trotting Trip warns of Germany, Japan and Russia."

"I am firmly convinced, as a result of personal observations, based on inquiries and talks with persons I have met during the last two years, that the people of the United States are not aware of the danger that confronts them in the possibility of a new triumvirate domineering the world.

"This, in brief, is the opinion of Charles W. Eaton, who left Haverhill three years ago and, after covering about 25,000 miles by automobile, visiting 38 of the 48 States of the Union, started alone westward on a trip around the world in November, 1920, finishing with a trip to Alaska, from which he has just returned.

"Mr. Eaton, a graduate of Massachusetts Institute of Technology, Class of 1885, is best known to alumni of that institution as donor of the Summer Engineering School in East Machias, Maine, conducted by M. I. T. The gift was made 10 years ago when he retired from business after completing extensive harbor improvements at San Juan, Porto Rico, and St. Thomas.

"Mr. Eaton, after the death of Mrs. Eaton, resumed traveling, covering nearly 25,000 miles by auto in 18 months in going across the continent and back and visiting 38 of the 48 States in the Union and only doubling on the Lincoln highway between Des Moines and Cheyenne.

"Starting out alone from Haverhill in November, 1920, he again went to San Francisco, and in 25 months visited Honolulu, Japan, Korea, Manchuria, the Philippines, China, Hindo-China, Malay, Ceylon, India, Egypt, Palestine, Italy, Switzerland, France and England, besides flying 800 miles over Holland and Belgium.

"Mr. Eaton says he thrives on traveling, having gained 40 pounds on his 25,000-mile trip of 18 months that began in 1919. In his tour of the world, he

1885 Continued

figures he traveled about 50,000 miles, stopping one and two weeks in each country and journeying into the interior by auto.

"He was a passenger on the Panhandle State last Spring when that vessel ran out of fuel on its westward trip, and after remaining in Haverhill for a week, started again for California, where he toured 6500 miles by auto and visited Mexico and Southern California. He also attended the Shriners' convention in San Francisco, after which he went to Seattle by auto and sailed for Alaska, whence he returned a month ago. He is planning another trip, intending to be gone a year on a visit to South America.

"'I have arranged to sail for Rio de Janeiro early next month,' said Mr. Eaton, 'and will attend the Brazilian exposition, and after that, I will go to Buenos Aires and start on an auto trip over the Andes to Valparaiso, after which I plan to go by steamer up the Pacific to Frisco, and probably come back overland.'

"The Haverhill globe-trotter, who admits he undoubtedly will keep on wandering so long as he lives, stoutly maintains there are more beautiful spots at home than abroad.

"Mr. Eaton, after he graduated from Technology, taught at that institution for six years, and then accepted a similar position at the Pratt Institute in Brooklyn, N. Y., where he remained four years, after which he accepted a position in organizing a memorial technical school in Northern New York."

Among the many letters relative to Billy Spalding's death, was one from Charley Allen, who is connected with The William Hood Dunwoody Industrial Institute, Minneapolis, Minn.

We are under obligations to Bob Richardson for a reprint of an article on "Investment Charge as Applied to Electric Power Rates" reprinted from the *Electrical World*, July 22. Bob is living on Gramercy Park, N. Y. (see telephone directory), and the latchstring is always out when he isn't.

When Tracy Lyon wrote in the spring, he was in Pittsburgh, doing some special work for his old chief, the president of the Westinghouse Company.

At last, after many years of weary waiting, we have had a peep from Frank Cutter who is at Corning, Calif.

The spring reunion at the Wianno Club, June 16–18, was most enjoyable. A combination of circumstances prevented several from coming, but it was of old, with Tiffany Cottage all to ourselves, and a good song ringing clear! Those present were President Dewson, Frazer, Jim Kimball, Litchfield, Pratt, Sise, Rawson and Schubmehl.

George Steel, who never misses a meeting of '85, couldn't be there, as he was in the hospital for about two weeks at that time. Artie Plaisted was on a fishing trip in Maine for a month. Dick Pierce was attending his 40th at Yale. Charley Brown was held up in New York. Jack Harding was under the weather in Springfield, and so on.

1887

EDWARD G. THOMAS, *Secretary*, Toledo Scale Co., Toledo, Ohio.

No notes received from the Secretary.

1889

WALTER H. KILHAM, *Secretary*, 9 Park St., Boston, Mass.

Every once in a while we keep hearing some more talk about Tech being a place where nothing but the most utilitarian matters are considered, or where perfectly good young boys are taken into a sort of mill which grinds them out in a standardized pattern of electricians or chemists or miners or even architects, soulless beings without a care for Art, Literature, History or "Le Beau" in any form. Some of us get this way so badly that we send our sons to Harvard so, as we fondly imagine, that they may absorb the Culture, Ethics and Belles Lettres in which that institution specializes and is believed by some to surpass. I only mention this because it has just struck me that for an entirely Tech-trained collection of men Eighty-nine has not done so badly in the line of Higher Things. Some time ago I called attention to Juddy Wales' beautiful marine etchings which, since his first exhibition last year, have attained a wide reputation. Juddy is still at it and another exhibition is promised for the winter.

Now comes Frank Hart with a real honest-to-goodness book called "Admirals of the Caribbean" packed with genuine thrills from cover to cover. Frank knows his subject and knows how to tell about it and for those who like the picturesque side of authentic history, the adventures of Drake, Morgan, dePointis and du Casse, Vernon, Rodney and others will supply exciting reading for several evenings; in fact, one feels so pleased to be living here now instead of in Panama or Cartagena a couple of centuries or so ago, that coal shortages, income taxes, prohibition and America as a World Power temporarily are made to cease their troubling and give the weary a rest. The story has, likewise, a fine swing of the sea which does full justice to the Spanish and French as well as the English, and it is good to find the author admitting that in several instances the latter were quite as reckless as their adversaries in shooting up and looting a wealthy and badly defended seaport. The book has numerous pictures and several maps of welcome clearness.

George Whipple is chairman of the sub-committee on plumbing of the Building Code Committee of the Department of Commerce.—President Arthur Williston is having the greatest success at the Wentworth Institute. The school is constantly increasing in enrollment and equipment and practically every session of the day and evening classes is crowded to the limit with young men.

1891

HENRY A. FISKE, *Secretary*, 275 West Exchange St., Providence, R. I.

The following appeared in a Salt Lake City newspaper:

"Detailed plans are being prepared for an investigation of the various troublesome milling problems affecting the metallurgical industry of the United States, to be made by the Bureau of Mines in coöperation with the American Institute of Mining and Metallurgical Engineers. The objects of this program of research are the increase of efficiency and the decrease of costs in pulverizing ores, increase of efficiency in screening and classifying, and the solution of other outstanding metallurgical problems in milling. Prof. E. A. Hersam, of the University of California, has been given an appointment as metallurgical chemist to take charge of this work for the Bureau of Mines. Professor Hersam will be located at the Massachusetts Institute of Technology and will work in coöperation with Messrs. G. H. Clevenger and Charles E. Locke. Mr. Clevenger is chairman of the milling committee and Professor Locke is chairman of the sub-committee on standard screen and elutriation sizing tests."

William Channing Brown, who has been traveling abroad, gives some very interesting views on the conditions "over there."

"Germany, I found rather well ordered, industrious and hard at work if a bit stolid and mechanical. The propagandist is busy. An affable gentleman and a perfect stranger accosted me in a drug-store to propose that, as America was the greatest country in the world and Germany the greatest (and cleanest) country in Europe, America and Germany should unite to rule the world. He took much pains to impress a warning against France and all things French. The people I met in Germany and those I came to know were gentle and kindly, also anxious to please. My wife and I suffered not the slightest embarrassment at any point and we came away feeling that, in spite of political troubles and the pinching of the middle classes, teachers and officials because of falling exchange, the average German was (early in July) well content with himself and his country.

"In the center of Europe and in close proximity to Austria and the Balkans is Czecho-Slovakia. It is an old civilization made up in part by ancient Bohemia and Moravia before the war. The charming fascinating city of Prague is the capital of the new Republic. Here is a country full of vitality, with eyes wide open, alert and proud, also thankful for the freedom which the war brought it. The industry of these people is more than habit — it is a passion. New and interesting experiments in democratic government are under way. The boys in the Army, the children in school, shopkeepers and peasants — all know what they want and are intent upon it. A country surrounded by nations where exchange has constantly crumbled finds itself able to balance its budget, or nearly so, and the 'valuta' has constantly climbed.

"On a bit of an island off the coast of Italy at the summit of the rocky sea-girt ridge I met Thomas Masaryk in his pleasant chateau. He is the President, almost the creator, of this new Czech Republic and one of the great steadying personalities of Europe. A man of seventy-two yet straight and alert as though he were forty. One of our party asked if Europe would settle down and come back to normal. He replied: 'Why, yes; there is nothing else for Europe to do.' In speaking of his own country, he said: 'I cannot say I am satisfied but,' he added, 'I am almost satisfied.' My wife expressed sympathy for Alice Masaryk because of bitter experiences in an Austrian prison during the war. That intrepid clear-eyed young woman just shrugged her shoulders and remarked casually: 'That's nothing — just a chance to learn something.' The President glowed with grateful satisfaction that the Czech people were now free from the Austrian yoke and the school children can look to their teachers and know they are not purging themselves daily in swearing allegiance and loyalty to tyrants. We came away conscious that Capri is the pearl of the Mediterranean as she basked in the soft summer sun — but a greater than Capri was here — the soul of a man who would dare all for virtue and freedom. The radiance of that choice spirit shall one day illume this dark trying period of the world's history. A life-sized marble statue of Thomas Masaryk, teacher, soldier, stateman, scholar, stands behind the speaker's desk in the hall of representatives in Prague. What Washington was to America, Masaryk is to the Czech people."

Harry Young, who is Treasurer of the J. L. Hammett Company, writes that they have recently completed a fireproof factory equipped with a complete sprinkler system on Jelliff Avenue, Newark, N. J. This building is 125′ by 105′, four stories high, with brick walls, steel construction, concrete floors and located on a railroad siding. They have used wooden block paving on the floors which is proving very satisfactory. A special catalogue showing kindergarten materials, manual training materials, materials for primary and grammar schools and educational games will be sent free of charge to anyone upon request and any '91 man is entitled to a ten per cent discount.

Steve Bowen has already engaged his passage to England for June sailing.

1893

FREDERIC H. FAY, *Secretary*, 200 Devonshire St., Boston 9, Mass.

GEORGE B. GLIDDEN, *Assistant Secretary*, P. O. Box 1604, Boston, Mass.

By this time, no member of the Class of '93 can be ignorant of the fact that on June 8, 9 and 10, 1923, the class is to have a real celebration of its thirtieth anniversary, this taking the place of the twenty-fifth anniversary celebration due in 1918, which could not be fittingly observed, owing to the war. George B. Glidden is chairman and Henry Morss and Herbert N.

1893 Continued

Dawes, vice-chairmen of the general committee of the reunion. No more need be said for the success of the event.

At that time, the class is to issue the thirtieth anniversary Class Book, which is intended to be a really worth-while record of the achievement of '93 members during the past thirty years. Questionnaires for the Class Book were sent out by the Secretary in October and every member is urged to supply promptly and fully the information desired.

Henry Morss, as vice-chairman in charge of publicity for the reunion, is sending out monthly bulletins which are certainly notable for their originality.

Charles W. Taintor with his wife and two daughters left Boston on August 19, for a trip around the world of nearly a year. The following letter has been received from him by the Secretary:

"I thank you very much for your courtesy and the trouble you took to send me the list of addresses for '93.

"As a second opportunity for a grand trip opened up, it seemed sort of up to me to drop a postal occasionally to some old '93 man who might perhaps be cheered by a message from a classmate — a wanderer in distant lands. I saw Baron Maki on September 30, when he brought his wife, a quiet, attractive Japanese lady, and his son, Nagatoshi, 4 years old, to call on Mrs. Taintor, the girls and myself at the New Imperial Hotel in Tokyo. Maki's face, a little bronzed, a little older than 25 years ago, but the same responsive brightening and cheerful laughter of the days at Tech, nearly 33 years ago. I last saw Maki on my previous visit to Japan in 1897. He was not married then — now he has a very attractive daughter and she has a daughter 11 months old. Maki has a beautiful house, Japanese and European quarters, garden, tea ceremony house and quite a good deal of land at Shiba in Tokyo, and there we were all entertained with tea and cakes, and all his family were present. Toshi, an active, vigorous boy of four with a good physique and fine head. Maki, happy, surrounded by his family, makes a group I shall always remember with pleasure.

"We have had a delightful trip thus far — Canada, with the splendid service of the Canadian Pacific Ry. — the superb Rockies with mountains, ravines, glaciers and rivers — the western slope toward the Pacific with fine trout and salmon fishing; we took lake trout, 5 and 6 pounders, at Sicamous, rainbow and steel head trout up to 20 and 22 inches and 3½ lbs. weight at Paul Lake, Kamloops; salmon, four weighing in all 33 lbs. and 13 oz. in the bay at Vancouver and 24 salmon trout or young salmon, weighing in all 8 lbs. caught on the same tackle on the same day as the bigger salmon. The Empress of Russia is a splendid ship and made the run from Vancouver to Yokohama in 10 days and no rough weather.

"Japan is as beautiful as ever — the temples and mountains at Nikko — the Alpine scenery at Ikao. The montains and views of Fuji here at Miyanoshita — also the chrysanthemum show at Tokyo and the wonderful harbor full of shipping right in front of the hotel at Yokohama — the island at Euashima — the Diahutsu at Kawakuce and the cheerful, happy Japanese children everywhere. We have about one more week for Japan and then we start for Korea, China and Laigo, etc."

Charles V. Allen is a live-wire in the office of the Westinghouse Electric International Company at Mexico City, he being that company's manager for Mexico.—James C. Boyd has opened an office at 65 West Commercial Street, Portland, Maine, as consulting engineer for railroad, pier and general industrial development work. He is taking an active interest in civic affairs at Portland and is on the Board of Managers of the Portland Chamber of Commerce.—Arthur A. Buck has been made assistant manager of the Patent Department of the General Electric Company, his address being: General Electric Company, Schenectady, N. Y. After his graduation from Tech, Buck was employed at the Lynn works of the General Electric Company where he remained a year, leaving to take a position in the Examining Corps of the United States Patent Office at Washington, D. C. While in Washington, he studied law at Columbia University and was admitted to the bar. Buck joined the Patent Department of the General Electric Company in August, 1899.

The firm of Fay, Spofford & Thorndike, Consulting Engineers, of whom Fay and Spofford, '93, and Sturgis H. Thorndike, '95, are the original partners, has recently been enlarged by the admission to partnership of eight of the principal engineers of the staff who have long been associated with the firm: John Ayer, M. I. T., '05; Bion A. Bowman, '09; Carroll A. Farwell, '06; Ralph W. Horne, '10; Ralph T. Jackson, '06; George L. Mirick, '93; Barzillai A. Rich (Tufts); Warren D. Trask (University of Maine). The business of the firm is being continued under the original firm name at new offices, 200 Devonshire Street, Boston.

Mirick, '93, who is the senior of the new partners, was a student at the Institute in mechanical engineering in the Class of '92 and in civil engineering in the Class of '93. After leaving the Institute, he was for two years town engineer of Everett and two years assistant city engineer of Malden, after which for eleven years he was a contractor engaged in building sewers, roads, waterworks, industrial buildings, etc., in and around Boston. During the following four years, he was superintendent on reinforced concrete construction for the Eastern Concrete Construction Company and the Aberthaw Construction Company, on large warehouses and coal pockets. He then went to Central America and for four years served as construction engineer for the International Railways of Central America and for the United Fruit Company at Guatemala and Panama. Returning to Boston in 1917, he was for a short time with Fay, Spofford & Thorndike, and during the fall and winter was employed by Monks & Johnson as resident engineer of the $3,000,000 Victory Plant at Buffalo, N. Y. Early in 1918, he returned to Fay, Spofford & Thorndike as resident engineer in charge of construction of the Boston Army Supply Base, a $25,000,000 project, and has continued with that firm as construction engineer until his admission to partnership this summer.

Elwyn W. Stebbins, mining engineer at 814 Mills Bldg., San Francisco, called at the Secretary's office in Boston in October. The Secretary greatly regrets that owing to absence from Boston on a vacation trip he missed Stebbins who has met but few '93 men since undergraduate days.—Frederic H. Keyes is now Editor of the Consolidated Textile catalogs published by the Textile World, his address being 324 Fourth Avenue, New York City.—Dr. Augustus B. Wadsworth of the State Department of Health at Albany, N. Y., sailed in October for a two months' trip in Europe.

1895

FRANK A. BOURNE, *Secretary*, 70 Kilby St., Boston, Mass.

Dr. C. G. Abbot, Assistant Secretary of the Smithsonian Institute, states in the annual report for 1920, that it may not be entirely impossible to open wireless communication with worlds other than our own, but the cost would be immense.

From the *Boston Traveler*, October 5, we learn that Miss Jessie F. Emery is seeking the nomination for representative in the 13th Suffolk District. We further go on to state that she resides at The Warren, Roxbury, is a graduate of Wellesley College as well as Tech, where she specialized in hygiene. She is a member of the advisory board of the Roxbury School Centre, and has been prominently identified with civic and philanthropic undertakings.

From the *Pittsburgh Dispatch* we learn that William Thomas Hall was one of the chemists attending the American Chemical Association meeting in Pittsburgh on September 4 to 8.

Miss Elizabeth F. Fisher was elected one of the officers of the Boston branch of the American Association of American University Women.

Gus Clapp was one of fourteen members of Massachusetts Forestry Association who recently took a two months' tour of the United States, studying forest conditions and vacationing at the same time.

Gerard Swope has just been elected a fellow of the American Institute of Electrical Engineers. The following note is from the *Lynn Telegram-News* of July 25.

"Mr. Swope, although an electrical engineer by training, has developed into a conspicuous business executive as well, one whose career has revealed ability for continual accomplishment."

In *Science*, New York, appeared a recent article by F. E. Matthes regarding waterfalls. He claims that from his physiographic studies in the Yosemite region of California, he considers it par excellence the land of waterfalls.

He states that the highest waterfalls in the world are of the slender "Bridal Veil" type, of which the Yosemite Falls seem to stand foremost, the entire height of falls and cascades being 2565 feet, but even with the cascades ruled out, the upper Yosemite Fall is the highest single unbroken leap of water in the world, 1360 feet. As far as he knows, the only waterfall exceeding this height is the Sutherland Fall in New Zealand, measuring 1904 feet in height, but this is broken about midway and makes no clear leap of more than 900 feet.

1897

CHARLES W. BRADLEE, *Acting Secretary*, 53 State St., Boston, Mass.

In the July number of the Review the only news of the class given, was a detailed account of the 25th reunion. This is why some of the following news items appear now, instead of sooner. In spite of the fact that some of the items have long since ceased to be news, they may be welcomed by the members of the class.

Prof. George L. Hosmer of M. I. T. was the principal speaker of the evening at the Greenfield Engineering Club at the close of the season last June. His subject was Navigation, and his talk was illustrated by slides, charts and instruments.

The class is now represented upon the Corporation through the election last June of William C. Potter as one of the Alumni term members. Potter is President of the Guaranty Trust Company of New York. He graduated from Course III and began his mining career in the west and soon attracted the attention of the Guggenheim mining interests, who made him manager of the American Smelting and Refining Company of Mexico. Later, he went to New York as president of the Intercontinental Rubber Company, which position he held for about a year. At the end of this time, he was made Vice-President of the Guaranty Trust Company. Several years later, he became chairman of its board and finally President.

We note from the *Baltimore News*, the following in regard to Morris K. Trumbull:

"Morris K. Trumbull has been appointed executive assistant to President Walter B. Brooks of the Canton Company. Mr. Trumbull became well known to Baltimoreans in the building of the new sugar refinery. He was a member of the consulting board under which the refinery was built and was one of the prominent officials in the ceremonies at the opening.

"Mr. Trumbull has had a distinguished career as an engineer. He is a native of Sedalia, Mo., and is in the prime of life. He graduated from M. I. T. and for two years was with the Government on the ship canal survey from the Great Lakes to tidewater in the St. Lawrence and Hudson Rivers.

1897 Continued

"Then for nine years he was with the Chicago and West Indiana Belt Railway Company of Chicago and the Illinois Central, the Santa Fe and the Chicago and Altoona. He was in charge of construction in connection with the separation of grades between streets and tracks and between intersecting railroads. Following this, he was for two years with the city of Chicago as expert on track elevation. For six years, he was Vice-President of the National Lumber and Creosote Company, a Texas corporation.

"Then followed his connection of three and a half years with the American Sugar Refinery Company as chief of appraisal of refineries and member of the consulting board which constructed the Baltimore refinery. This position on the consulting board was of an administrative character. Mr. Trumbull's experience in railroad terminal problems and industrial work gives him particular fitness for his new duties."

Prof. Alfred Mansfield Brooks, A.B., A.M., IV, has received more than national recognition. He resigned as head of the Department of Fine Arts at the University of Indiana to become Head of the newly-created department of History of Philosophy of Art at Swarthmore College last September. In Indianapolis, he had been serving as curator of prints at the John Herron Art Institute since 1910. He also has lectured frequently in Indianapolis and over the state on various phases of art and architecture. He was graduated and received his A.M. from Harvard. After leaving the Institute course in Architecture he went to Indiana. He has written a number of books, among them being "Architecture and the Allied Arts," "Great Artists and Their Works by Great Masters," and "Dante, How to Know Him."

The death of two of our members has recently been reported.

Miss Annetta Bruce, VII, a teacher at Talladega College, died at Talladega, Ala., on Jan. 9, 1922, following a sudden operation.

Earl Potter Mason, II, died at his home in Summit, N. J., of a complication of diseases on Aug. 14, 1922. He was not able to attend the 25th reunion because he was ill at that time. His presence was missed by all who were there and a telegram was sent from the class dinner to Mason.

He was a son of A. Livingston Mason, and member of a family for many years prominent in Newport society. He was connected with the Anti-Corrosion Engineering Corporation of 117 West 54th Street.

1899

W. Malcolm Corse, *Secretary*, 1701 Massachusetts Ave., Washington, D.C.

During the summer, the Secretary made a trip, leaving Washington about the middle of July — stopped at Philadelphia, New York, Boston, Marshfield, Woods Hole, and Martha's Vineyard, Massachusetts; coming back by way of New York to Washington. During this trip he met a number of '99 men and had some very interesting visits. Lawrence Addicks certainly looks as though the Life Extension Institute had given him some good advice and says the trouble with the Secretary's office now is that it is too difficult to keep up with the change of address. The Secretary hopes that this matter will be remedied, because, being at the capital of the nation, it is difficult to change. The Secretary met Addicks and Harry White on the ferryboat going to New York in July, and talked to them about the twenty-fifth reunion in an effort to get opinions regarding the best place.

Some of our men feel that the place selected by the '98 men, namely, the Riversea Club, Saybrook, Conn., is probably the best place. Others think that the Lake Placid Club, at Lake Placid, New York, is the best because it gives such splendid facilities for entertaining the ladies, as well as unexcelled opportunity for sport.

In Marshfield, the Secretary saw Miles Sherrill and Ben Hinckley. He had a very pleasant game of golf with Miles and a pleasant visit with Ben, and found them both in the best of spirits. — In Boston, Hervey Skinner is busy with the consulting work at his office, and the enlargement of his concern has proven all that he hoped. Skinner visited Washington this fall and the Secretary had another opportunity to renew old acquaintance.—A. A. Johnson is now connected with the National Research Council, Marine Piling Committee, located with headquarters at New York, 29 West 39th Street, working under the direction of Col. William G. Atwood, Director of the Investigation.—At the installation of the Virginia Chapter of the Delta Upsilon Fraternity at the University of Virginia, recently, the principal speaker was Clifford M. Swan, V.

Frederick R. Sites has been appointed private Secretary of Judge Elbert H. Gary, chairman United States Steel Corporation. He served for about a year in a minor capacity at the Central blast furnaces of the American Steel and Wire Co., Cleveland, and later for about a year in the metallurgical department of the Carnegie Steel Co., Homestead, Pa. Nine years ago he became connected with the United States Steel Products Co. and has just returned from Shanghai, China, where he has been manager in China for that company. During a part of the years 1918–19, Mr. Sites was Treasurer of the Federal Shipbuilding Co., but returned to China when the export business became active after the war. Judge Gary became well acquainted with Mr. Sites while making a tour of the Far East six years ago.

Our twenty-fifth reunion will come in 1924, and it is none too early to begin to plan for the event. Suggestions as to the best place will be welcomed by the Secretary.

1901

ALLAN WINTER ROWE, *Secretary*, 295 Commonwealth Ave., Boston, Mass.

Your Secretary, in response to a notice from the Editor of The Review, evinced his willingness and intention to send in class notes every month instead of on the alternate months as was originally planned. So far as he is concerned, he is prepared to live up to the contract. He must, however, invite a certain measure of coöperation, and that to be extended by those members of the class who, up to the present time, have failed to send in a data sheet. Delicacy, of course, forbids his mentioning class dues.

In the meantime, there are a few stray items of interest which it gives me much pleasure to transcribe.

Fred White is traffic supervisor of the New York Telephone Company. I should imagine this would be glad intelligence for all '01 men now in the Metropolis. Many years ago when Farnum was in Boston in the same position, your Secretary found that the use of his name—entirely unendorsed, of course—always produced a very wonderful quality of service. There should be food for thought in this suggestion.

Arthur Hayden, another member of the class, from whom no word has come in several years, is now senior assistant engineer of the Bronx River Parkway Commission. He writes that his work is the direction of the design of structures for the new reservation.

Ellis Lawrence writes from Portland, Oregon. He and Billy Holford are still in partnership. Ellis is Dean of the School of Architecture and the Allied Arts at the University of Oregon, as well as a practicing architect. He writes that he has recently served on a Jury of Award in Honolulu for the War Memorial there. He says that he met Bigelow, who is superintendent of Public Works of the territory, and in this capacity is making an enviable record for himself.

If memory serve, Horace Johnson is also a representative of our island possession. But Ellis apparently did not see him there. He suggests that we hold our 25th reunion in Hawaii, and your Secretary will be very glad indeed of any comment from members of the class as to the feasibility of this. We are due in some two years and a half to celebrate this most important and auspicious event, and Hawaii presents certain definite claims. The territorial jurisdiction of the United States over these lovely islands may exercise an inhibiting influence on some of the class. Canada, too, has its attractions, while if one yearns for the Tropics and the manifold delights portrayed by song and story, there is always Havana. Let me know what you think of the proposition.

One more quotation from Ellis' letter may be of interest to many members of the class. I quote literally:

"Am serving as President of the Oregon Association of Building and Construction,—a branch of the National Building Congress. An interesting attempt at organizing a great industry for public service. Already a fine relationship between capital and labor has been accomplished here. Steps have been taken to organize a real apprentice system (so badly needed)—a seasonal employment survey is under way. Investigation of abuses, costs, etc. The Governor appoints two of our directors representing the public. The field is limited to education and research. Membership made up of individuals not organization, thus the hod carrier has the same voting strength as the banker. It is interesting to see them fraternizing and listening to the troubles of each division of the industry. Perhaps it may help to establish mutual respect and confidence without which the future must be very dark it seems to me."

May I say parenthetically that if more members of the class would send in letters of this sort, they would give the pleasure to the other members of the class which they themselves enjoy in these letters.

Billy Pepperell writes from Providence. He states, among other things, that he is working in two large cotton mills with a common Treasurer. The adjective surprises me in connection with such an exalted office, but as Bill is also a Treasurer, perhaps he lacks the perspective of reverence. As Oliver Herford poignantly states, "Familiarity Breeds Attempts." Bill writes that his new job was assumed after twenty-one years with the Draper Company, and that the position was one created for him.

Your Secretary recently had the pleasure of addressing the Tech Club of Rhode Island in Providence, but he looked in vain for William's pallid features. He plans, however, to visit Providence again in the near future on the same errand. W. S. Pepperell, please notice. For the benefit of those who may be going through Providence, Bill's new address is 144 Prospect Street for his home, while Box 1384, Providence, is the business address. I hope they have larger post office boxes in Providence than we have in Boston.

Roger Wight is now in Boston at 25 Kilby Street. He writes that he expects to settle permanently here, and after a few friendly comments, makes reference to the fact that your Secretary's name is not in the telephone book, ascribing unworthy motives. Roger might have considered that the cost of a telephone is a potentially large factor in the budget of an humble teacher.

Al Sulzer is still taking pictures in Rochester, N. Y. He writes that Charlie Flint is also with the Eastman Company and adds the further information that many of the men in positions of authority have a common origin in Technology. With contacts such as inevitably must be his, it remains only a matter of time, I presume, before we hear of Al in Hollywood—and we all know what that means. Eastern papers please copy.

Frank Holmes writes tersely and in my opinion, inaccurately, concerning interesting news regarding himself or any other '01 men that, "There ain't none." How any man who is associated not only by the ties of friendship, but the bonds of personal association with Freddy Boyd, can make such a statement, passes my comprehension. When one considers, however, that Freddy's contribution to this same item is to merely draw a line to the bottom of the page reading, "Enclosed please find $2.00 for 1922 class dues," I am forced to believe that there is a conspiracy of silence.

1902

FREDERICK H. HUNTER, *Secretary*, Box 11, Roxbury, Mass.

BURTON G. PHILBRICK, *Assistant Secretary*, 585 Boylston St., Boston, Mass.

The world is moving on—a son of 1902 has entered Tech this fall. The Class Detective was sent over to Cambridge soon after the Institute opened and found that George Henry Ames had entered as a member of the freshman class. After he had executed this commission, we sent our astute official on a wider tour to other colleges and he returned with further information of interest. At Harvard, he found that our "Class boy," Edward Joseph Gorfinkle, is registered as a member of the sophomore class. While at Cornell he found that Charles Linder Pope (son of Harold Pope, not his cousin, Robbie) is a freshman in the engineering school at that institution. While on his way back, he stopped off at the State Normal School at Framingham, Mass., and found that Miss Mamie U. Lewis graduated from that institution last June and is now teaching in Dedham, Mass. In the course of his travels he found that a number of our offspring, mostly daughters, will enter college next fall, so that a year hence, some ten or a dozen children of '02 will be in college.

Harold Pope and Bill Lewis "stole a march" on most of the class by quitting Tech while the rest of us were still there and getting married forthwith. Pope's eldest daughter, Leonora, is already married, she being, we feel sure, the first daughter of '02 to be wedded.

Replies are coming in briskly for the Class Directory, which is to be issued about New Year. The following items are of special interest:

William N. Brown is special sales representative in Cleveland for the Kalmet Metals Co. and the Austin Machinery Co. with an office in the Guardian Building, his residence address, 1448 Highland Ave., Lakewood, Ohio, is preferred for mail.—Edward Burnham is agent for the New York Life Insurance Company in Chicago.—Charles H. Hickey is in the Boston office of the Bureau of Chemistry, Department of Agriculture.—Lewis Moore took an auto trip this summer to the Central States, calling on some classmates while in Chicago.—Arthur Nelson is going abroad this fall for a two months' trip, his wife accompanies him, and his brother, Mr. William H. Nelson of Boston, is also in the party. He reports that Arthur T. Nelson, Jr., arrived March 17, of the present year. This is Nelson's first son, his other two children being daughters.—William H. Leathers is living at Sarasota, Florida.—Miss Sarah L. Bates is teaching Home Economics in Spellman Seminary, Atlanta, Georgia. This is a high grade school for colored girls associated with Moorehouse College.—Arthur Jackson is with the Darco Corporation of New York. When writing, he was making an extensive business trip, but expects to be in New York a considerable part of the time after December 1. His residence is 495 Columbia Road, Boston 25, Mass.—Matt Brodie, who is Asiatic representative for the Sullivan Machinery Company, with headquarters at Yokohama, care of American Consulate, is in the United States for a vacation, having written us from the Lafayette Club, Minnetonka Beach, Minnesota. He will return to Japan soon, starting about the first of the year, and expects to visit New York on the way. We are urging him to take in Boston, also, as there are many of us who would like to see our Champion class traveler.

1903

CHESTER S. ALDRICH, *Assistant Secretary*, 4 Colliston Road, Brookline, Mass.

LeRoy B. Gould, Manchester, N. H., in a note written from York Beach, Maine, reports that he is still doing plant engineering for the Telephone Company in New Hampshire. New developments are coming so fast in this industry, that his company has recently established a school for its engineering force in which a regular technical course of training is given. He reports having met Harold Osborne who is with the Fred T. Ley Company at Springfield, Mass.

Horace S. Baker writes that he was discharged from the army in July, 1919, and since then has been with Frank D. Chase, '01, of the firm of Frank D. Chase, Inc., 645 North Michigan Avenue, Chicago. He spent a year at Jaynesville, Wis., building the Samson Tractor Plant, but since then has been located at the Chicago office.

Edmund A. Garrett in a letter from 461 Eighth Avenue, New York City, tells us that for the past five years he has been engaged in designing and printing so-called "sales literature," often of a highly specialized nature. As to news of a family nature, he married Clara Pfeifer of St. Louis, seventeen years ago, who is a sculptor of unusual ability. They have two children, Earl, fifteen and Julian, twelve, and lead a quiet home life at Brightwater on the South Shore of Long Island. A cordial invitation is extended to any of his old classmates who happen to be traveling in that vicinity.

Capt. Walter H. Adams, U. S. A., received his discharge from the army in October, which he applied for some months previously, and has gone back to California with his family, where he will build a bungalow near Los Angeles, and take up again the operation of his chicken and fruit ranch which he started before the war.

During the summer, a circular letter asking for information was sent out personally by Aldrich and Gleason to all class members whose addresses

1903 Continued

were obtainable. This was done with the consent of your class Secretary, and with a view to enlivening a little interest among '03 men. The replies that have been received will be briefly edited in this and subsequent issues of the Review, but it is rather interesting, if not appalling to note that the number of replies received represents less than 10% of the mailing list.

The reasons for this apparent lethargy are probably more or less varied, but judging from slight indications in some replies, it appears that perhaps two reasons stand out most clearly. The first was the feeling that whatever news was written would not be passed along to the rest of the class, and the second was the feeling of many men that because they were leading a more or less humdrum life, no one would be interested to hear about it.

We hope that those in the first class will be pleasantly disillusioned and that the second class will realize that even commonplace, every day information is interesting to the rest of us. We all have to admit that most of the real thrills in life came before 1903, anyway.

Please send in any news or information you can.

1905

ROSWELL DAVIS, *Secretary*, 19 Thorndike St., Beverly, Mass.

S. T. STRICKLAND, *Assistant Secretary*, 26 Pemberton Square, Boston, Mass.

Announcement is made of the election to the office of Assistant Secretary of Sidney T. Strickland. The nominating committee showed rare good judgment in the selection of the candidate, and the class deserves congratulations for the unanimous election.

For some time, members of the class living in and around Boston have been getting together each month at the Boston City Club for luncheon. While the attendance has not been large, usually ten or a dozen, everybody has had a good time, and more are expected as winter draws on. Anybody who finds himself in Boston should call up the Assistant Secretary, who will give him the date of the next luncheon. Stragglers from the most distant parts will be cordially received.

Dr. and Mrs. W. K. Lewis announce the birth of Mary Kimball Lewis.—The address is wanted of Daniel Hine, XIII; last address Eastford, Conn.—E. A. Burkhardt has returned to Boston and is now with James W. Elliott's Business Builders, Inc., with offices at 240 Boylston Street. He writes:

"It certainly is a real pleasure to get back to the old town and live once more among all the old friends and familiar faces, and not the least of these pleasures is to see some of the boys of the grand old class.

"As you know, I took my family to New York over three years ago, just before the passing of John Barleycorn on July 1, 1919. You and some of the boys have some idea of the close relationship that had been established between the said John and the clan of Burkhardt, and that his demise was something of a shock, you can also understand. Not only that, but John left no will, and his administrator, one Mr. Volstead, from some outlandish place in the Middle West, cooly advised us that there was no estate, in spite of our modesty in claiming only 2¾–3%. I believed him and still do, but others of the clan, and even more distant relations of John, are sitting tight in full expectations that a bequest or legacy will yet be forthcoming of about the proportions quoted above. However that will turn out, and whether my dope is poor stuff, the said dope sent me to undertake a new career.

"There has been in these three years the usual admixture of weal and woe, with the latter probably somewhat in excess, thanks to the tough business period we have all experienced. For the last eighteen months I have been virtually 'on my own' functioning as accountant and industrial engineer, ministering chiefly to sick businesses whose name has been legion. There has been much hard work and much fun in these reorganizations and new programs, and in the follow-up necessary to complete accomplishment. Much fun, I say, but leavened, of course, by the constant wonder if the fee would be paid. You see most of the businesses were very sick.

"But even though the fee was delayed, the experiences gained through this period, treating with all kinds and sorts, have been but a new apprenticeship, and of the stiffest kind, replete with hard work and hard knocks; the best thing a man can have, and which he must get if the innate merit inherent is to come forth in fullest measure.

"My work brought me into contact with many, and I knew sooner or later these associations, and my experiences, would land me right. Therefore, I have lately joined the James W. Elliott's Business Builders, Inc., of New York, an organization originated by Mr. Elliott, for the purpose of financing and manning in an executive sense, expanding businesses of merit. My own connection is with the Boston office, where the conditions and atmosphere are most congenial, and where we are now engaged in placing the securities of the Manhattan Piggly Wiggly Corporation, and arranging for the establishing of the stores."

Dr. Edward W. Washburn has resigned as head of the Department of Ceramic Engineering at the University of Illinois and moved to Washington, D. C. He is to be editor-in-chief of *International Critical Tables of Physical, Chemical and Engineering Constants*, and chairman of the Division of Chemical Technology of the National Research Council.—Edward M. Coffin has developed into quite a skipper, winning the class championship of the American Yacht Club, Newburyport, Mass., with his sloop Osiris.—William G. Ball has joined the staff of the Inspection Department, Associated Factories Mutual Fire Insurance Companies, 184 High Street, Boston. He reminds us that E. A. Barrier and A. D. Balkam are with the same organi-

1905 Continued

zation.—Eliza J. Newkirk, of the Wellesley College faculty, designed and superintended the construction of the new faculty recreation and apartment house, nearing completion at Wellesley.—John Ayer has been admitted to partnership in the firm of Fay, Spofford and Thorndike, Consulting Engineers, Boston.—For a year or more, Warren K. Lewis has been retained by the Standard Oil Company as Consulting Chemical Engineer.

News Item: October 10. The Standard Oil Company has declared a 300% stock dividend. News Item: October 16. The Standard Oil Company has reduced the price of gasoline one cent per gallon.

Good work, Doc. Don't stop. Now get the gas quality back to what it was a couple of years ago and you can have the Republican nomination for President.

Andy Fisher is again at the bat, as will be seen by the following letter from James M. Curley, Mayor of Boston.

"I am grateful for your suggestion that the new bridge over the Charles River at Massachusetts Avenue, which some day will undoubtedly be built, be known as the Technology Bridge.

"As I have a profound appreciation of the benefit that would result from the united efforts of the faculty and students of the institution fathering the movement for the bridge, I have a fear, however, that the substitution of the name Technology Bridge for the name of Harvard Bridge, by which it has long been known, might render it extremely difficult to secure the passage of the necessary legislation which, unless I am greatly mistaken, can best be enacted by designating the structure as a Memorial Bridge to the Soldiers of the two cities, Cambridge and Boston.

"It is my earnest wish that the legislation, when adopted, provide sufficient funds for the erection of a structure that will be in keeping with the splendid group on the Cambridge side of the Charles River, namely, the Institute of Technology."

But this won't settle it. Andy will have his way in the end if he has to organize a legislative lobby, and we are with him.

Andy is strong for more Tech dormitories, but does not want them on the proposed site around the Walker Memorial where the boys now get outdoors and play ball. He thinks the vicinity of the Cottage Farm Bridge would make an ideal location.

There is no doubt but that the dormitory question is one of the most serious at the Institute, a school of 3000 with living accommodations for a couple of hundred. Probably this is one of the first questions that President Stratton will interest himself in. As to the location that Andy is booming, we should like some expressions of opinion.

Having read some of the class notes in the first number of the new Review, your Secretary is aware that he has entirely omitted the item of greatest interest to alumni, id est, news.

Much has happened in the last few years, and the record cards indicate that the addresses are in many cases out of date. If you have changed your address, or have reason to believe your present address is not listed, let us know at once. If you think we have your address, let us know what you have been doing since the war. Do it now!

1907

BRYANT NICHOLS, *Secretary*, 2 Rowe St., Auburndale, Mass.

HAROLD J. WONSON, *Assistant Secretary*, Manchester, N. H.

The Secretary met H. G. Pastoriza on the street in Boston late in October, and he said he had just met B. C. Gupta, our classmate who came from India. Gupta is head of the Department of Electrical Engineering at the University of Calcutta, India, and is now back at Technology for some graduate work.

Frederick C. Faccard has made good in a large way, being mechanical superintendent for the Anaconda Copper Mining Company, with his office at 516 Hennessy Building, Butte, Montana. He has five children, two boys and three girls.—E. W. James, of Tech Show fame as author, is chief, Division of Design, Bureau of Public Roads, Washington, D. C. He is second in the engineering line, administering the Federal Aid Act, which provides for the largest program of public works ever undertaken by any nation at any time. The author of some eighty pamphlets and articles on highway engineering, he has also made about one hundred and fifty addresses before legislation committees and various bodies all over the United States. He is married and has a daughter about fifteen years old.—Thomas C. Keeling is President and General Manager of the Nashville (Tennessee) Machine and Supply Company. Tom has three sons.

The following letter, of interest no matter who the author, is of special interest to '07 men, as it was written by our classmate, A. T. Kolatschevsky. It was written to an aunt of a well-known Boston lawyer, who met our associate when he was in Boston, in acknowledgment of a gift which she made to him through the American Relief Committee in Russia.

"How can I express to you my gratitude for your generous and most timely gift which you were so good as to send me through the American Relief Administration. After all we have been through during the last few years, it is comforting to feel that there are far-away friends who have not forgotten us, and so much more so when they prove it in such a substantial and gratifying manner. Now that the four parcels have arrived, it seems

Travel

In acknowledgment of the constantly increasing interest in foreign travel, the Technology Review inaugurates a set of pages on which will appear advertising of reputable concerns whose business it is to deal with some feature of this type of commerce. We recommend them for patronage.

1907 Continued

hard to realize that this quantity of foodstuffs is really ours, especially when we remember that there have been periods when we could not get a morsel of brown bread for several days at a time. We then lived almost entirely on boiled potatoes and a microscopic dose of cereal. During the famine we saw people become as thin as skeletons, after which their faces and bodies would swell, owing to the amount of liquid they absorbed to satisfy their appetite—and finally they would die, sometimes owing to a slight cold—being too weak to withstand disease. Many people we knew went away in that manner.

"All our thoughts were directed toward the means of providing sufficient nourishment for our boy, who is now twelve years old. That was a very difficult problem, for at one time it was impossible to buy anything to eat. Money had no value whatsoever and we had to barter with the few peasants who occasionally came into the city and offered potatoes, flour, milk and so forth in exchange for silver spoons, clothing, phonographs, jewelry and household utensils. How many homes have been practically emptied in this way, it is hard to tell, as it is also hard to estimate how many succumbed.

"We are all very grateful to the American people for the generous help they are giving in feeding millions of Russians in the devastated regions where the famine is most severe. The A. R. A. is doing splendid work all over the country. In this city they are feeding children up to thirteen years of age, whose state of health is greatly undermined.

"The four packages of foodstuffs which you and Miss — were so good as to send us contained 216 pounds white flour, 108 pounds rice, 44 pounds lard, 12½ pounds tea, 40 pounds sugar and 80 cans condensed milk.

"The situation is, in general, much improved. There are shops open again, steamers are bringing in victuals from abroad, and we are hopeful for a better future.

"If it is my good fortune to revisit Boston some day, I shall be able to relate considerably more than I can in writing at this time.

"Once again, let me thank you on behalf of my family and myself for your kind remembrance and valuable gift, which we all so much appreciated."

Clarence R. Lamont is an insurance broker and automobile loss adjuster, with headquarters in Boston. Benvenue Street, Wellesley, Mass., is where he lives with his wife, two sons and two daughters.

Edward G. Lee, I, is in charge of the office of Sawyer and Bean, hydraulic engineers, 11 Lisbon Street, Lewiston, Maine. Three daughters make home a real place for him and his wife at 22 Highland Street, Auburn, Maine.—Ernest F. Lewis is a booster for the Technology Club of New York, as evidenced by his recent letter to the Secretary asking for names of men near the metropolis, whom he might secure as club members. He is associated with H. T. Blanchard, architect, at 137 East 46th Street, New York City. Lewis is not married.—Roy W. Lindsay, sales manager of Pratt and Lambert, Inc., varnish and enamel manufacturers, Buffalo, New York. Roy and his wife live at 179 Parkside Avenue, Buffalo, N. Y. — Henry D. Loring, who is enthusiastic enough '07 man to come to the reunion at Yarmouth last June from Cincinnati, is chief engineer and a director of Ferro Concrete Construction Company, in that city. He has two sons. He is a member of a sub-committee rewriting the reinforced concrete provisions of the Cincinnati Building Code, and also member of a committee of experts advising the rapid transit commission regarding damage suits.

Byron P. Luce is one of the leading experts on sugar machinery in the country, being chief engineer of the Caribbean Sugar Company with office at 11 Central Street, Boston, and field of work in Cuba. He developed, designed, erected and placed in operation a new and complete sugar estate at Manopola, Cuba; initial capacity of house 150,000 bags of raw sugar, a $2,250,000 plant. Luce has three children, his home address being Hingham, Mass. — W. S. Lucy is chief engineer of the Hammermill Paper Company, at Erie, Pa. A little daughter born in March, 1922, is his only child. — George D. Luther is manager of the Seattle (Washington) branch of the Electric Storage Battery Company. George has one son eleven years old.—Frank MacGregor, another one of our class bachelors, is at the head of the paint department of E. I. duPont de Nemours and Company at Wilmington, Del. — Milton E. MacGregor, is Junior Master at Mechanic

1907 Continued

Arts High School, Boston, Mass. Mac lives at Needham, Mass. He has two children. Outside of his mathematics, he enjoys mountain climbing, being business manager of White Mountain Huts for the Appalachian Mountain Club.—Alexander Macomber, our President, is a member of the firm, Carver, Macomber and West, at 261 Franklin Street, Boston. Mac is active in various professional and social organizations.—Herman W. Mahr, chemical engineer in the dye division of E. I. duPont de Nemours and Company at Deepwater Point, N. J. Mahr is married but has no children, lives at 34 Zeigler Tract Penns Grove, N. J.

Edward H. Marsh, who will be remembered as a lieutenant at freshman drill, has made a success as a physician in New York City, where he is a consultant in the division of venereal disease for the New York State Department of Health. He has written several articles and many addresses on his special field of medicine. Dr. Marsh is married, but has no children. He lives at 542 16th Street, Brooklyn, N. Y.—W. H. Martin, assistant to the Vice-President of Day and Zimmerman, Inc., Engineers, at 611 Chestnut Street, Philadelphia, Pa.

Sam Marx (like John Frank, an "old faithful") member of firm of Robert K. Greaves and Company, tool steel, 1336 West Washington Boulevard, Chicago, Ill. Sam followed architecture from 1909 to 1919, and did some notable work. He is married, but has no children.—Howard H. McChesney is Philadelphia manager for Halcomb Steel Company, of Syracuse, N. Y., with office at 633 Arch Street, Philadelphia. He has two daughters.

In the field of finance, Jack McMillin has made fine progress. Ever since 1908, he has been with Henry L. Doherty & Co. of New York City, in public utility and petroleum operations. He is now director of Cities Service Company, and in the financial department of Henry L. Doherty & Co. John lives at 21 Fairway Close, Forest Hills, Long Island, N. Y., with his wife and two children.

1909

CHARLES R. MAIN, *Secretary*, 200 Devonshire St., Boston, Mass.

GEORGE A. HAYNES, *Assistant Secretary*, 530 Atlantic Ave., Boston, Mass.

After a lapse during the summer months, the Technology Review comes to us again in a new form. Generally speaking, the class notes will appear in alternate issues. The Secretary would like to make our own notes as interesting as possible, but to be able to do so, must have the coöperation of each member of the class. What may seem insignificant to you is oftentimes of great interest to others. Will you write me occasionally, so that other members of the class may know where you are located and what you are doing?

T. C. Desmond, President of T. C. Desmond & Co., Inc., Engineers and Contractors, has recently moved his office to 125 East 46th Street, New York City. The T. C. Desmond & Co., Inc., have recently been awarded the contract for a twenty-story building, the Park-Lexington Building, at Park Avenue and 46th Street. It is reported that this work will cost about $2,000,000.

Mr. and Mrs. Lewis B. Curtis of Waldemere, Bridgeport, Conn., announce the engagement of their daughter, Miss Alice Curtis, to Thomas C. Desmond of New York City. Miss Curtis attended Miss Porter's School at Farmington, Conn., and is a member of the Junior League. No date has as yet been set for the wedding.

Fay, Spofford & Thorndike, Consulting Engineers, 200 Devonshire Street, Boston, Mass., announce that they have admitted Bion A. Bowman to partnership. Bowman has been associated for some time with this firm.

At the International Radio Congress held in Chicago last August, one of the speakers was John Mills who has been the author of several technical books dealing with the development of the present system of radio and telephonic communication. His lecture was illustrated by demonstration experiments by lantern slides and moving pictures and described recent studies of the voice and of its action on the human ear which have been made by the Research Physicists of the Western Electric Company and the American Telephone and Telegraph Company. Mills is associated with the Western Eletcric Company.—J. D. Creveling was elected President of the Natural Gas Association of America at its 17th annual convention held recently in Kansas City. Creveling is head of the Natural Gas Division of the Empire Gas and Fuel Company, with headquarters in New York.—Mr. and Mrs. Henry K. Spencer announce the birth of David Eaton Spencer on Oct. 9, 1922. Congratulations!

Chester H. Pope has been associated since March, 1922, with Philip Ruxton, Inc., 247 Water Street, Brooklyn, N. Y.—B. E. Hutchinson, Vice-President and Treasurer, of the Maxwell Motors Corporation, is the author of the paper, "Selling Your Department to the Others," appearing in a recent number of *Management and Engineering*.—George E. Washburn has been appointed to the faculty of the University of Buffalo. He is to be assistant professor of the romance languages. Professor Washburn was formerly assistant professor at the Pennsylvania State College.

The Secretary desires to call attention to the fact that the offices of his firm have recently been moved to *200* Devonshire Street, in the Massachusetts Trust Building. He hopes that any members of the class who are visiting Boston will not fail to call on him there.

1911

ORVILLE B. DENISON, *Secretary*, 63 Sidney St., Cambridge, 39, Mass.

JOHN A. HERLIHY, *Assistant Secretary*, 588 Riverside Ave., Medford, 55, Mass.

FOREWORD. When in the course of revivification of the Technology Review it became necessary for the new editors to ascertain how often secretaries would supply notes, your h. s. immediately became one of the charter members of the "eight issue" club. What does this mean? Simply this: '11-ers must now "Write to Dennie" more frequently in order that the standard of the 1911 notes as established in quarterly issues may be maintained through eight issues per year. A word to the wise is worth two in the bush!

The w. k. stork visited the home of Mr. and Mrs. Frank A. Wood in Beverly on the sixth of October, and left with the proud parents David Russell Wood; weight ten and one-half pounds.

Our glorious class is certainly prominent in the administration of the Technology Club of Rhode Island this year with "Chet" Morey, President and Morell Mackenzie, Vice-President of the organization.

Prof. Robert T. Haslam has been appointed head of the laboratory of applied chemistry at Tech, to succeed Robert E. Wilson, resigned. Previous to this, Bob has been in charge of the institute's school of Chemical Engineering Practice.

The *Boston Evening Transcript* under recent date had this to say concerning an erstwhile classmate:

"Harvey A. Sweetser, a Government commercial agent, who has served for more than three years on the staff of the American commercial attaché at Paris, has been assigned by the Bureau of Foreign and Domestic Commerce to its New England office in the Custom House, Boston. Mr. Sweetser is a native of Brockton and a former student of the Massachusetts Institute of Technology. From 1908 to 1918, he was connected with the Home National Bank of Brockton. He enlisted in the Army in April, 1918, and served until December of that year, when he was appointed assistant to the commercial attaché at Paris.

"The appointment of Mr. Sweetser to Boston is in keeping with the new policy of the Department of Commerce to station in its district offices men with foreign experience. Mr. Sweetser travelled extensively in western Europe and brings with him a first-hand acquaintance with France and other countries which will enable the local office to extend more valuable assistance to New England business men."

Had a nice chat with Don Stevens early in October. He is most enthusiastic about the wire and cable game in which he is now engaged. He dropped around to the Simplex Wire and Cable Co. for a call at the close of his vacation, and then returned to New Jersey, where he is with the Okomite Company.

Having hoped against hope that the Eleven Year Book of Eleven could somehow or other be published, your Secretary has never published the tabulation of the replies received, regarding earnings of members during the tenth year out of Tech — June, 1920 to June, 1921.

As it has been definitely decided that it is impractical and impossible to publish the book, it seems a good plan to present these figures now. A total of one hundred and twenty-four unsigned replies were sent to the Alumni Office, opened and the anonymous cards forwarded to the Secretary. This represents thirty-one per cent of the class.

The incomes ranged as follows:

From	Thru	No.	%	From	Thru	No.	%
$23,000		1	0.8	$4,500	$5,000	10	8.1
$15,000	$20,000	3	2.4	4,000	4,500	7	5.7
10,000	15,000	7	5.7	3,500	4,000	19	15.3
8,000	10,000	5	4.0	3,000	3,500	20	16.1
7,000	8,000	9	7.3	2,500	3,000	13	10.5
6,000	7,000	9	7.3	2,000	2,500	5	4.0
5,500	6,000	9	7.3	$2,000		3	2.4
5,000	5,500	4	3.2			124	100.0

Maximum $23,000 — Minimum $2,000
Average $4,850

Note 42% of those replying are between $2,000 and $4,000 and in this range the average is $3,400 per year.

1912

F. J. SHEPARD, *Secretary*, 568 First St., South Boston, Mass.

The first monthly issue of the Review has come to hand just as these notes are being written, and I am sure that you will all be as pleased with it as your Secretary is. The monthly contribution of class notes, however, only serves to accentuate the scarcity of said notes. Won't you each one consider yourself a contributing editor and send in any little news items, such as marriages, births and any other unimportant happenings.

The St. Louis *Globe Democrat* gives the following notice of the marriage of Joseph Desloge, VI:

"Miss Anne Farrar, daughter of Mrs. Bernard G. Farrar of 14 North Kings-highway Boulevard, has chosen October 10 as the date of her marriage to Joseph Desloge, son of Mr. and Mrs. Firmin Desloge of the Washington Hotel. The ceremony will be performed in the home of Mrs. Andrew Sproule, an aunt of the prospective bride, and the guests will be limited to close friends and relatives. Rev. Father John Spencer of St. Roch's Church will officiate. Mr. Desloge and his bride will pass their honeymoon touring Mexico, and they will occupy an apartment in the Colchester upon their return to St. Louis. Miss Farrar was educated at Mary Institute and at Montreux, Switzerland. Mr. Desloge served during the war as an ambulance driver, and was deco-

1912 Continued

rated by the French Government with the Legion of Honor medal, and received several citations for bravery under fire."

J. E. Rush, VII, the newly-appointed Field Director of the American Society for the Control of Cancer is appearing in the press notices very frequently, as this Society is now engaged in a vigorous educational campaign. They believe that in ten years, if the present activity can be continued, 30% of the lives now needlessly sacrificed can be saved. Since graduating from the Institute, Doctor Rush has devoted himself to Preventative Medicine in the Biological Department of the Massachusetts Institute of Technology, and the University of Wisconsin. He received his certificate of Public Health from New York University and his medical degree at the University of Pittsburgh. From 1916 until he accepted his present commission, he has taught Public Health and Sanitary Engineering at the Carnegie Institute of Technology, Pittsburgh.

Dave MacGrath, VI, of the advertising staff of the *Electric Railway Journal* is in Boston frequently, and usually finds time to call upon your Secretary while here. At present, Dave is one of the team captains of the New York Technology Club in their drive for members. Dave will, I know, be able to secure your election to this august body.

Marcel Desloge, IV, who, with Joseph Desloge, operates the Killark Electric Manufacturing Company of St. Louis, Mo., was in Boston last week on business. They have a wide distribution of their electrical specialties, which include enclosed fuses, conduit fittings, bell ringing transformers, etc., having sales offices in all of the principal cities of the country.

Carl Somers, IV, who is in the contracting business under the firm name of Somers & Drisko, with offices at 168 Dartmouth Street, Boston, reports business to be extremely good at present. Among some of the larger contracts which they have in process are buildings for the Charles River Country Club, at Newton, the Newton Center Women's Club House and the Newton Center Unitarian Church.

O. C. Lombard, VI, was found at home in Short Falls, N. H., by your Secretary in the early part of September. It was certainly a pleasure to meet the "country gentleman" and to look over his store. Lombard handles everything that any one could possibly need in all lines. His drug department is complete, as is his hay and grain store; hardware, dry goods, men's haberdashery, as well as other things too numerous to mention. Oliver is certainly looking well as is Mrs. Lombard and their two rugged children.

F. H. Busby, VI, who is with the C. H. Tenney Company, Boston, was prevented from attending the reunion in June by a very serious illness which kept him from the office for nine weeks. Busby is now firmly on his feet, however, and reports that he has three husky boys who are all growing up to go to the Institute.

Mrs. L. H. Goodwin in response to your Secretary's request as to what L. H. Goodwin's activities were before his death, writes as follows:

"Most all of his time since graduating was spent in mining examination work. He was with A. H. Rogers in Boston two years and later three years with the firm of Rogers, Mayer & Ball in New York. He had written several articles for the *Engineering and Mining Journal* and was a member of the American Institute of Mining Engineers. From Jan. 1, 1922, until his death, he was employed by the American Bureau of Metal Statistics."

The close application necessary to this work brought on a nervous collapse which resulted in his death. He leaves, besides Mrs. Goodwin, three children; Ruth, aged 7, Ralph 5, and Donald 3.

1913

F. D. MURDOCK, *Secretary*, 230 Chandler St., Buffalo, N. Y.

R. CHARLES THOMPSON, *Assistant Secretary*, 120 Milk St., Boston, Mass.

From the very generous response to the annual letter sent out in October, we get the impression that our reunion next June is going to be very largely attended. Of course, occasions of this kind, without exaggeration, do happen only once in a lifetime, and for that reason a man should deny himself a good many ordinary pleasures to take in his tenth-year reunion.

It is with the deepest sorrow that we announce the death of our genial classmate Frederick T. Robinson, I. "Rosy," as he was called, was a particularly amiable and witty fellow, and he was successful in his business life. He was the kind of fellow who will be missed.

Joseph Oppenheim, V, was presented with a second boy, Edward Marshall in August.—C. W. Gotherman, VI, is the proud father of a new son, born in August.—J. M. Beale, II, is still a bond salesman.

J. B. Shelden, IV, notes: "Left off construction work to temporarily be in the office of J. E. O. Predmore, Architect, 1213–15 First National Bank Bldg., Chicago, until building conditions here are a little more settled. Just want to say "hello" to all the fellows in the class and wish them health, strength and prosperity."

When in New York, drop in to see Phil Barnes, X, he says: "We have a young '13 Colony in this neighborhood. Freeman has his office directly over mine, Holmes is across the street, and Wemple about a block away. Am right handy to the Grand Central and would be mighty glad to have any '13 visitors drop in. Steam heat, stamps and telephone free."

Sam Rogers is on the job as engineer with the National Fire Insurance Company.—L. B. Hoyt, I, is wrestling with road construction problems. He writes: "Am building a boulevard along the Merrimac River (first Lowell),

1913 Continued

Some culverts around water mains which are below the bed of the river. Gives us variety."

S. W. Parker, III, is selling steel and reports good business. He writes: "Tomorrow, October 14, I celebrate my sixth wedding anniversary by starting on a trip through the White Mountains. Sort of annual honeymoon affair."

"Jack" Horner, IV, makes plans for a living. He writes: "Couldn't persuade enough people to let me build houses for them to keep me busy, so I had to build one for myself to fill in my time. Expect to move in in a month or two, and here's hoping that me and the Archy-tect is still friends."

After his long silence we are glad to print Gerry Fallon's, III., remarks. "Have been in steel or allied lines since graduation, interrupted by a year and a half in naval aviation. At present, am developing my own business as steel broker and agent for a couple of small independent producers. Do not sell structural, so the present building boom in Boston does not affect me. However, things are coming along all right, and I expect to trade the flivver for a real car soon. I travel New England and see some of the boys from time to time. My office is at 141 Milk Street, Boston, and I hope to see any and all that are in town and will look me up. Am looking forward to the reunion, ready and anxious to do what I can to insure its success. And, oh yes, I'm not married — yet."

Fay B. Williams, II, is assistant superintendent of Walker & Pratt Mfg. Co. He writes: "Accepted commission as Major in the Officers Reserve Corps in September. Business looks better than at any time since the war. Plant working nights and holidays and orders piling up. Some strenuous life."

Bill Mattson, I, chips in the following: "Glad to hear you are feeling fine. Am looking forward to the reunion. A perfectly pippin partnership Parker, Parsons, Pardey and Peck."

"Hap" Peck, II, solicits patents for a living. He reports "Robert D. Peck born May 29, 1922 weighing 10 lbs. All fine to date. Too busy to let you know before or to answer that letter of yours sent me last spring. Best of luck, Fred."

A. D. Conant, II, is Supervising Engineer for the New England Telephone & Telegraph Co.—Purchasing Agent is the new job which P. V. Burt, VI, fills in the Babson Statistical Organization.

Read what R. G. Daggett, XI, has to say: "I do almost anything the Linde-Air Products Co. can't get someone else to do. When I used to work in the subway we had a 'kike' from Cooper Union that did the general work around the office, such as drafting, plotting, running errands and holding the zero end of the tape. One day when out on some sort of errand one of his friends asked him what he was doing for a living and he replied 'general engineering.' Please list me under this heading."

E. C. Gere, I, is temporarily at Camp Pike, Ark., and doesn't know what will happen to him.—G. T. Lane, V, is superintendent of the paper mill of the Eastman Kodak Company.—Rusty Sage, I, contributes the following: 'The adult members of the Sage family, both members of 1913 (a unique circumstance and not otherwise equalled by any other '13-ers) are:

1. Parent Teachering and running household of four kids and irresponsible husband.

2. Following construction as a method of paying expenses incurred above.

3. Both like their jobs and are doing well."

Read about the tragic things that are happening to Harold Rand, I, "I am getting fat and bald. You wouldn't know me. I don't know why I am getting fat, but having weathered six years of married life is probably the reason why I am getting bald. Family is still three. We are happy and seem to be getting our share of the breaks."

Stanley Davis, VI, is in the paper box business for himself. He writes: "The boys know that I captured a Boston girl last January, and now dear old Tech may boast of a prospective candidate for say 1930."—H. Elwell, II, notes: "Representing the A. E. Nettleton Company, Manufacturers of men's fine shoes from Denver to the Pacific Coast with headquarters in Los Angeles as above. Too much has never been said of Los Angeles."

From the *Chemical and Metallurgical Engineering Journal* we learn that Prof. Wm. G. Horsch was appointed chairman of a committee to arrange a symposium for the spring meeting, on the subject of Electrode Potential. That sounds like something very important; I think you will agree with me. Professor Horsch has recently resigned his position at the "Institute" to engage in Chemical research for the Chili Exploration Company Laboratories.

A. L. Townsend, II, writes: "No change in my work or home life since the joint news of Horsch and myself, which you received some time since. No doubt you would be agreeably surprised to know that J. C. Mackinnon, VI, is pinch hitting in Walter Humphrey's office since the latter resigned from the Institute. Since Horsch has left to go into private work, I guess that Mac, Parsons and myself now constitute the '13 triumvirate at the Stute. I have a convention partly on my hands which will not be consummated until January 1, and I cannot be of any help until after that date. Should the reunion committee care for any assistance let them holler after 1-1-23."

We are glad that things are breaking better for one of our agriculturalists, A. P. Smith, VI, who is farming at Stowe, Mass. He writes: "Fortune is smiling more brightly than for three years past. Have a very good crop of Baldwin apples and a barn full of good cows. So we look for a comfortable winter. I have forwarded three bucks to the Alumni Treasurer as you suggest. Iam looking forward to June, 1923, with zest. My wife and boys have the bug.' 'Save it for June.' So you will see us all."

Read A. E. Hirst's, V, invitation: "Practically nothing to say. Took a drive through Maine and Canada this summer and got by the customs office O. K. by looking virtuous, so if any '13 men should be troubled with snake-bite, I shall be glad to apply the proper remedy. Don't crowd."

We have a regular editor in the person of A. F. Brewer, III. Just run your eye over his contribution, it may help your style of writing.—"In the words of 'Lily' the *Saturday Evening Post* Goat, 'Writin fo de class news am de fondest thing Ah is of,' so here goes. Since my last divulgence of pussonal affairs I have forsaken the grand old State of Texas, to again take up my domicile in Jersey. You see, the Texas Company decided they needed an Editor for our magazine, *Lubrication* and I became the goat. It's a great little job and if I keep on learning at the present rate I'll know more about lubrication than Mr. Texas or Mr. Standard themselves. Am also writing a great deal for the engineering magazines on the side. I'll send you a recent copy of *Combustion* under separate cover with my recent article on Fuel Oil Economies therein. Saw Howlett on Broadway a few weeks ago. Also have a date with Kirk Macfarlin, '14, for lunch next week. I'm getting around the country quite a good deal, also, on certain research work attached to my job so may have the opportunity to drop in on you, one of these days, and talk over the reunion. Of course, I'll be there with bells on."

Don't miss what Henry Dew, III, has to say about class notes. Some of you loafers, collectively speaking, might read it two or three times. "Accept my congratulations on the amount of interesting class news you manage to assemble. As many others have put it, my chief pleasure on receiving the Review is to see Who's Who in 1913. You use an excellent system, and your constant attention deserves a reply even from those of us who have nothing to report. This will let you know I am living — though probably some of our more fortunate married members will say I am only alive and haven't yet started to live. Still a rolling stone, yes, and not an exception as far as the moss is concerned. However, I have learned to ease up on the bumps so manage to keep going. At present, I cover the eastern half of the United States about three times a year, and hope in the future to make the Pacific Coast once in a while. If my plans carry I will be on hand in Boston next June, and shall look forward to renewing many fond ties. In the meantime, if any of the old bunch are in New York they will receive a warm welcome at 12 West 44th, whenever I am in town. With warm regards."

Albion Davis, I, writes: "Still watching the big river and the work it accomplishes here at Keokuk. I find my work more and more interesting. Was East this summer for two weeks at Star Island, Isles of Shoals, off Portsmouth, N. H., attending Unitarian Laymen League Institute for Religious Education. Had a most enjoyable trip down the St. Lawrence and through the White Mountains on the way east. One misses the hills out in this part of the country. Saw B. F. Thomas in St. Louis about two weeks ago. Our oldest child, Eleanor, started school this fall. She's six. It hardly seems possible but it's been eight years that we've lived in Keokuk. And the strange part of it is, I like our job better than ever."

C. S. Roe, I, is treasurer of the R. E. Olds Co., The Ideal Power Lawn Mower Co. and the Ideal Engine Co. That ought to make him a busy man. He notes: "Nothing much to report except two boys, one four years old and one eleven months. Am making plans so as to be in Boston next June, but plans do not always come through."

B. E. Brooke, IV, writes: "Can only say that I like it out here and am getting my share of such work as there is. At present, need a good man on the drawing board and would like to get hold of a Tech student with experience."

Walter Whitehead, III, is in Australia on work of a geological nature.—I. W. Knight, VI, notes: "I am with the Extinguisher Co., Providence, sort of a 'Jack of all trades' in connection with development and test of new apparatus. Put an elastic band around my pocketbook last spring and wore a sign all summer 'Radio bugs keep off,' but I'm skidding fast now and presume I'll soon be buried to the ears with tubes, sockets, condensers, etc. However, I'll try to salt down enough dough before I skid too far to cover expenses of that 10th reunion you mention. It certainly sounds good."

W. A. Ready, VI, is manager and acting president of the National Company, Cambridge, Pa. He writes: "Make phonograph toys, some engineering apparatus, a mighty good cream beater and a little radio. They are the original 'Chop Suey Kids.' Family still stands at three, minus their tonsils and adenoids. How far are you from the Canadian border?"

G. R. Pardey, VI, is salesman for the Westinghouse Company. He took a June bride this year, Miss Marion J. Watts.—A. Katz, XI, is advertising manager for the Ludlow Mfg. Co., Associates, Boston. He writes: "At present in the sales division of the Ludlow Mfg. Associates, which certainly is far a field from engineering. Nevertheless, learning how to extract the shekels from the Consumer (with a capital 'C') through the medium of colored ink and typewriter ribbon, and find sufficient to do to make life interesting."

E. H. Smith, III, is a naval officer. He is specializing in research work of a very interesting nature. He notes: "Specializing in research work on "movements of ice in North Atlantic" and general oceanography. This in connection with international ice patrol and ice observation at Harvard Graduate Service School. In the spring, go on boxed patrol ship and remain at sea from March — July continuously."—A. C. Goodnow, X, is manager of the Jacksonville Gas Co., in Georgia. He reports the birth of a daughter, Joan.

Edgar Menderson, II, has the following complaint: "Still busy distributing Durant four and six cylinder cars. Referring to your maid and her beau we have a bouncing new baby in the Durant family called the 'Star' which bids fair to outgrow the others. It seems to be a favorite child with the public, too. Can't get them nearly fast enough. Worse luck."

1913 Continued

Bill Brewster, II, cannot suppress his instinct for politics. He is now a member of the school committee of the town of Plymouth, Mass.—R. B. Haynes, I, was happily married last February to Miss Edith Williams a New York girl. From his remarks, I get that he has little complaint with life.—W. E. Caldwell, X, has the proper reunion spirit. Read what he notes: "Have made my plans to be at the 10th reunion for just as long as there is anyone there. See Clark, X, and Gangon, II, quite often."—F. H. Mahoney, V, is manager of the Everett Distilling Company. He notes: "I am still single and expect to continue so. Keeping busy making alcohol both grain and denatured. How would it be if the reunion were held in our back yard here? I will work the place overtime a few weeks to prepare for it."

A. M. Loeb, II, is now a merchant and contributes the following: "For the past five years, since leaving New England, the land of gears, cogs, wheels, belts, etc., I have lived quietly here in the South as a merchant. Have two future Tech men as sons, one four years old and the other two. The management of them is the only outlet I now have for my Tech education."—A. Vogel, IV, writes: "Everything about the same as last year, the same wife, same son, same house, same car, same job, same office force, new stenographers and a lot of work. Last year this time no work, except holding down a chair. Buildings now under construction in Oakland, Calif., Atlanta, Ga., and Philadelphia, Pa. Except to have building operations to look after in Detroit, Cleveland, New York and a few other places. Holding down the job of engineer in charge of Plant Engineering Department for the General Electric Company keeps one well acquainted with the geography of the United States."

H. A. Burr, I, notes: "I am now well in my third year with the Tenn. Highway Commission, a year ago being appointed assistant bridge engineer. Our work is varied and affords fine experience. A few months ago the contract for our largest bridge was awarded. It consists of about 22 concrete arch girders 44′ spans and two 180′ steel trusses and one 280′. The river piers are 113′ high. At present, yours truly is designing reinforced concrete arch bridges. The tendency lately has been to lean more and more to the arch type because of its superior appearance and lower cost. If you will recall old days at Tech, you will remember how I used to attend class all bent over with asthma and scarcely able to speak. I am either outgrowing it or getting more sense, as I am not troubled with it near as much as formerly. I was in Massachusetts for three weeks last year but did not see any of the bunch. Next year, I intend coming up again and hope to attend our tenth reunion. My boy is four now and I intend heading him for Tech." Burr's friends will be happy to learn of his relief from asthma.

1914

H. B. Richmond, *Secretary*, 62 Tufts St., Arlington, Mass.

G. K. Perley, *Assistant Secretary*, 45 Hillside Terrace, Belmont, Mass.

What did Fourteen do to Healys? The meeting place of the Boston luncheons has been forced to close its doors. The Boston contingent is now without a home, but has high hopes of obtaining a new location at an early date. If possible, the monthly luncheons will be resumed the first Tuesday in December. While the Boston luncheons have been temporarily discontinued, the New York luncheons are still thriving under the successful direction of Sousa Brooks. Sousa has a special "Paste me in your hat" post card that is very effective in getting the crowd out.

The reunion replies continue to come in, but two-thirds of the class is yet to be heard from. Up to November first, 92 replies out of over 300 sent out had been received. Seventy-nine per cent of those replying were married, which indicates a high average for 1914. Sixty per cent indicated that the wives should be included. Approximately half of the men replying hoped to be able to attend. No preference has yet been expressed as to the time of year. The vote is 33 for June, 33 for September, and 26 without preference. The week-end vote is almost unanimous. The location is also rather undecided, 20 favor Boston, 19 the shore between Boston and New York, 17 the Berkshires, and 37 no preference. Fifty-two only have stated that they favor a Ten Year Book. This is far too small a number to make such a publication possible.

Before starting with the notes for this month, it is desired to call attention to an error appearing in the November issue. The arrival of Joseph A. Joeth was announced. This should, of course, have been Joseph A. Goeth. We hope Ralph will excuse us this time and we assure him that next time we will be more careful in our proof-reading.

Don Crowell advises us that he has carried out his threat to stop commuting between Boston and Montclair, N. J. On October 14, he became the obedient husband of Miss Doris Berry. Congratulations to both!

Jack Hines also joined the benedicts on June 14, and is now living on Sedgwick Avenue in upper New York. Jack spent his in the Adirondacks, principally at Rainbow Lake.

Several new arrivals have been reported during the past month. They are as follows:

Lincoln Dodd Richardson, February 13; Marie E. Olesen, March 12; Kenneth M. Eberhard, October 8; Ruth Frank, May 7; Patricia Louise Gardner, August 16; Elizabeth Frances McEnary, March 19. The father of little Miss Gardner is Henry L. Gardner, I.

A very creditable showing for Fourteen, we think.

Ross Dickson, X, is still enjoying Europe, and particularly that which cannot now be obtained in the United States. Ross expects to return shortly, much to his regret, we suppose.—H. S. Busby, XIII, calls our attention to the fact he is just completing seven years with one company — Cheney Bros., at Manchester, Conn. Most Fourteeners have held at least three positions in that time, and many five or six.—Ed Murphy, VII, who is a captain in the C. A. C., has been transferred again. He is now at Fort Casey, Washington.

While making a mad rush for breakfast at the Statler in Detroit, recently, your Secretary collided with another who had also overslept, and was trying to get in before the doors closed. On second glance I found I had encountered none other than Howard G. Borden, IX. Borden it will be recalled was the successful candidate for the position of Director of Administration and Labor, Department of Institutions and Agencies, State of New Jersey. He was in Detroit attending a meeting of the American Prison Association. Howard again repeated his offer to see that any Fourteeners in New Jersey prisons were well taken care of.

After a lapse of several years, Werner T. Schaurte has sent us a communication. He is at Louvenburg, Neuss, Germany, and President of the Bauer & Schaurte Allgemine Geschellshaft. He was married in November, 1917, and has one son, Christian, born Oct. 6, 1918.

Walter P. Keith, who joined the staff of the newly-organized Seiberling Rubber Co., is now with that company at their Newcastle, Pa., plant as superintendent.—A. W. Johnson has transferred to the Kardex Co., as district manager. Art is living in Belmont, Mass., and calls our attention to the fact that he has a year-old daughter, Barbara.—Russ Trufant is on the march again. This time we find him at Carbondale, Ill., with the Highway Division, acting as chief of survey party. He writes that he is an itinerant engineer, and the next time we hear from him he may be in Alaska, but if he has his say it will be Cuba.

While in St. Louis, recently, your Secretary enjoyed a talk with Phil Morrill who insists that he still manages to keep busy with Bemis Bros.—Percy McCullough, who is with the same company, could not be located as he was at the Home Cotton Mill just outside of the city. McCullough expects to go to England, shortly. After his long stay in India, a trip to England will be a mere vacation to Mac.

Harold Fay is spending the current winter as an assistant at Harvard University. He informs us that he may return to Europe within the next two years.—Bill McPherrin has transferred to the Globe Plaster and Mining Co., as sales manager.—One day, recently, when I was purchasing a ticket in the local ticket office, Henry Aldrich, III, stepped up and asked for tickets to Madison, Wis. Aldrich is a professor at the University of Wisconsin and has been spending the summer exploring copper deposits along Lake Superior. Mrs. Aldrich had spent the summer in Boston and Aldrich had come here to take her back.

Lieut. J. H. Currier has been transferred to the U. S. S. Kittery. He writes as follows:

1914 Continued

"I was transferred from the Delaware to the Kittery last June. The Kittery is a little old ex-German in the naval transport service and makes regular runs from Norfolk to the West Indies. I like the ship very much. I get three weeks in port, then three weeks out on a trip. Run into a great many pleasant parties down in Haite and San Domingo when we go there.

"Saw Burnham, VI, a few weeks ago in San Domingo City and had a very pleasant half-hour, talking over old times together. He is a Captain in the Marine Corps, and is stationed at Santiago, D. R., but was in San Domingo City for a few days. He looks about the same, but has put on a little weight. Apparently, the tropics agree with him."

The following from Israel Paris is of interest:

"Those who knew me as a confirmed city dweller will be surprised to find Mrs. Paris and me in the little house in the woods on top of the hill, with almost an acre of ground under cultivation. They will understand when they learn that a one-eyed colored baptist preacher was responsible for the results of the garden. Our place overlooks the Potomac, and Mrs. Paris likes it so well that, despite the one hundred and sixty steps she must climb to reach the house, she insists we stay there all winter. So all Fourteeners who spend their winters in Florida are invited to stop off at the Hilltop on their way South. And those Fourteeners who happen to be in Washington on business are invited to make my office their office."

1915

FRANCIS P. SCULLY, *Secretary*, 118 First St., Cambridge, Mass.

HOWARD C. THOMAS, *Assistant Secretary*, 100 Floral St., Newton Highlands, Mass.

The Secretary called on the Assistant Secretary the other night on his way to make a social call in Natick and calmly said that as he had no news for this month's Review, it was up to us to fill up our space. We dug around one of our desk drawers and found several letters and notices which we had saved for just such an occasion. To us, it was just like finding money in an old suit.

As the first thing in life is birth, we will start with announcing the arrival of Kenneth Despres Kahn, Jr., son of Mr. and Mrs. K. D. Kahn. Kenneth, Jr., arrived April 12, 1922, but the arrival was in Los Angeles, Calif., hence the delay in the mail.

Philip Alger, VI, also announces that Philip Langdon Alger, Jr., was born Aug. 1, 1922 in Boston. On the back of his card, Phil writes as follows: "I take pleasure in announcing the arrival of a member of the class of '44 at the Institute. Since the war, I have been with the General Electric Company at Schenectady, studying the theory of electric machinery. It has proved a very pleasant life there. If any of the Fifteeners visit the place that lights and hauls the world, I hope they will look me up at 305 Rosa Road." We extend our congratulations to both of these proud fathers.

During the summer, we received a nice letter from Henry Daley, II, who is still located with the B. F. Sturtevant Company at 135 North Third Street, Philadelphia. Henry writes as follows: "Just a little chirp from the town of Billy Penn. I think that the last time that I wrote you was about one and one-half years ago when I was packing up bag and baggage, moving from Pittsburgh to Philly.

"Am still with the B. F. Sturtevant Company, as you will note from the letterhead; in fact, have been with them since 1916, except a period of a year and a half during the war. Have been on the sales force for the past three years handling power plant apparatus. One of my most recent victims was J. F. Guthrie, II, who is plant engineer for the Abrasive Company here in Philly.

"Col. Pat Kellar is a neighbor of mine, living a block away. Yep, Pat is still a confirmed bachelor. He is associated with the local branch of the B. F. Goodrich Company.

"So Les Morse has done gone and got hitched! They all fall sooner or later.

"Larry Quirk and Hen Sheils make me tired bragging about their youngsters. I have a seven-months old youngster that has them all backed off the boards. The neighbors say he is a chip off the old block, which may or may not be a boost for his Highness, the Crown Prince.

"Well, Howard, if you ever get down this way, be sure and look me up. The same applies to any of the old crowd. Good luck to you."

The next letter will probably cause some adverse criticism from the class Secretary because he says we have too much news from one crowd, but it isn't our fault if that is the only crowd that takes enough interest to write and let us know what's doing. Our old friend, Hovey Anderson, writes from Brooklyn, N. Y., thus: "Lester turned up yesterday (August 30) and brought along the last number of the Review and of course '15 notes were the first to interest me and also the old gang came back into mind. Guess I'm an orphan from the crowd now, but it is probably my own fault. I spent the first six months of the year up home doing nothing but killing time and did manage to see George (Rooney) once. Got in town once in a while but always came with company and kept too busy to look up the bunch. Called the Honorable George T. once while passing through and as Les Morse was also in town he was to fix up a reunion but I heard nothing of it and before I got around to call him again I got this chance to return to work, so here I am.

"Back to the old love — compressed air tunneling. Guess I am the only '15 sandhog engineer left, though quite a few broke into it in 1915. I like the wind, it never has bothered me and I have eaten a lot of it. New York is a good field for compressed air work, so it looks as if I'd follow it 'till the doctors barred me for old age.

"Am now on the Hudson River Vehicular Tunnel job and am located at the shaft in Jersey City. It's a big job and will be quite a time in building. So far, we are not very busy, but by the first of October they should start sinking the Jersey shaft. Just now, we are doing some interesting pile-driving out in the river just at the pier head line. These piles are to set the river shafts on, which will serve for ventilation. The piles run about 270′ long, 24″ pipe, and 20′ sections. They are driven to rock and will then be filled with reinforced concrete up to the elevation of the bottom shaft some 90 or 100′ below high water, also down in the mud. The pipes, or remaining sections, will be cut off before the caisson is sunk down upon the top of the concrete pile. There are 84 of these piles to go down, 42 under each caisson.

"Have not been very busy the last year, or since I came back from Guatemala. About 50–50 on the work, 50% of the time loafing, and the other 50 I put in looking out for the inspection for the states of Maine and New Hampshire on the caissons for the new bridge between Portsmouth and Kittery. We had 39 pounds of wind up there.

"How come George didn't let me in on the affair of Tech Pops Night? Maybe he thought I wasn't eligible because I didn't have a wife to bring along. Still single and all by myself quite a bit of the time but I am not always alone, I'll tell the cock-eyed world. Could write more on the subject but I am afraid you might publish it. (He's right, I would.) Remember me to everybody."

In case anybody in New York wants to look Andy up, his address is 225 Schermerhom Street, Brooklyn, if they know where that is.

From the Technology Club, New York, St. Elmo Tower Piza, IV, sends this:

"I know a class secretary's life is just one thing after another (our wife checks us on this) but let me presume upon your good nature for a favor. Here at the club we are inaugurating a drive to 'Double Our Membership.' One man from each class is preparing a list of possibly eligible classmates for purposes of a mailing list. Will you kindly check up the enclosed list.

"By the way, I have recently changed my address. I am with Cass Gilbert, one of the most distinguished of the Tech architects and my home address is 39 West 27th Street, New York City. No, I am not married, thank you. How many of us are there left? (Not many.)"

Frank robbed us last month of one of our reliables when he published Jim Tobey's letter but Sanford Willis, III, comes through as usual with the following letter, which we print intact:

"On my return from an eight months' trip to Europe, I found four Technology Reviews, together with a bunch of other class and Alumni notices. The whole lot brought forcibly to my mind that I have paid no class dues for some time and I am writing you in hopes that you can set me right as to how much I owe.

"I have been somewhat of a bird of passage during this past year. I quit the Tariff Commission to take a job on the selling force of the Corning Glass Co., and my new employers sent me to Europe in an effort to straighten out some of their patent claims abroad, and to sell certain of their patent rights, notably those covering certain glass blowing machines, and the manufacturing rights for the Pyrex glass formula.

"The trip was planned originally for three months, but delays of one kind and another held me back so that it was nearer eight months before I saw the old lady down the bay. The trip itself was interesting because of the opportunity which I had to compare conditions in Europe now with those I found there last year, but eighteen months away from my family during the last twenty-four, is a little bit too much of a good thing. Fortunately, I was able to have Mrs. Willis with me for the first four months, but my youngsters lost all idea of what their daddy looks like. The kids were asleep when I arrived home, and the next morning there wasn't the slightest sign of recognition from either my son or daughter.

"I may remark by way of news that my second daughter arrived in this vale of tears on August 19. I feel now that I can afford to sit back and let 'em grow.

"At the present time, I am rather up in the air about future events, but figure on continuing with Corning so long as the Company is agreeable. It may interest the Chemists and Chemical Engineers in the class to know that Pyrex is now manufactured in sizes and shapes suitable for plant work. We are making large pipe and tubing, evaporating dishes, flasks and retorts, and new uses are being developed every day. We have developed a glass high tension insulator for work up to 200,000 volts that bids fair to give the porcelain type a good run for its money. These new products fall under my supervision more or less, and I can assure anyone interested that we are glad to consider any and all proposals for special apparatus.

"There is one other '15 man here. Hilbert has been in Corning since shortly after he left Tech, I think. Other Tech men include Mr. Gray who has charge of all mechanical development and Mr. Taylor, who is second in command of the technical department.

"I expect to be in Boston off and on during the coming fall and winter, and would appreciate having notice of any class activities that I might fit in with business obligations.

"Best wishes to yourself and my best regards to any of the class that you run into."

The first class luncheon, which is held the first and third Thursdays of each month at the Boston Tavern, came today and was very successful.

1915 Continued

A pleasant time was enjoyed by all; "all" being the Secretary, the Assistant Secretary, and "Red" Rooney. After the Class Dinner, which comes November 18, we hope these luncheons will be more successful.

That is about all we've got for this time and we wish that you would remember that the class notes are published every month, therefore you must write twice as often as formerly. If you didn't write at all before, that means you must write every three months now.

As to ourself, we have returned to Lockwood, Greene & Co. and are now located in our new building at 24 Federal Street. We have also sold friend "Lizzie," so you can see we are doing our part to get back to normalcy.

1916

WILLIAM W. DRUMMEY, *Secretary*, 533 Washington St., Dorchester, Mass.

E. H. CLARKSON, *Assistant Secretary*, Sante Fe Ranch, Del Mar, Calif.

A meeting of the class has been called for 6:00 p.m. Wednesday, November 8, at the Boston Architectural Club, 16 Somerset Street, Boston. This building is situated just below the Boston City Club, and on the same side of the street. Dr. Lipka will be the guest and will deliver an address on European conditions as he found them during his recent years' sojourn and travel there. Notices were sent to all members whose addresses are within fifty miles of the State House.

We take great pleasure in announcing the marriage of Miss Florence Nightingale Mead to Mr. Walter Vinal Reed, XI, on Thursday, September the twenty-eighth, at Quincy, Mass. Mr. and Mrs. Reed will be at home after January 1 at Burton Terrace, South Weymouth, Mass.

Would that the rest of you fellows would follow Loomis's example and write in a letter like this following:

"If you will consent to a pencil written letter, I'll try to add my mite to the fund of class news — if not — well, you will probably have to decode the thing, anyway, before you can read it, so it might as well be easy for me.

"First and foremost, I'm now traveling the wilds of Michigan for the Bemis Bros. Bag Co., and with one exception see no Tech men of any class, breed, or color. I moved up here about July 1, from St. Louis, and in that the Lord was good to me, for about one more St. Louis summer would have found me among those missing. My present task is to impress on the bean and potato shippers of the state the fact that such products, when shipped in Bemis bags, have a flavor that can be obtained in no other way. Tell your wife, if you are lucky enough to have one, to be sure to demand beans in our best burlap. They come only 100 lbs. to the sack, and by eating them at least once a day you will not only insure perfect health, but will stimulate my sales. So much for that.

"My present address is 46 Campan Building, Detroit. As I'm never there, it is quite safe to give it. However, it serves as an excellent receptacle for my mail, and on Saturdays I usually favor it with my personal presence.

"Most of the following news of '16-ers is old, but I'll pass it on for what it may be worth: 'Hen' Shepard, II, and Santa Claussen both dropped in on me last spring in St. Louis, and passed on all the class gossip. Shep was in town several days, so I managed to have him out to dinner. — Young, II, and Joel Connelley, XI, were still located in St. Louis when I left, Young as an executive in the Robert Gaylord, Inc. paper box business, Connelley as the prize lobbyist of the United States public health service before the Missouri legislature. I don't know just what Joel's actual title is or was, but he had a uniform an' everything, and seemed to be doing considerable public health lecturing. I judged from what he said that he not only liked his work but was making a decided success of it.

"Here in Michigan, I have seen only one '16-er—Harvey Jackson, IV, who has an architectural practice of his own in Grand Rapids, not to mention a charming wife and a ten-months-old baby. I enjoyed their hospitality at dinner not long ago, after which Harvey and I tried to dig up the history of all the '16-ers we had seen in the last few years. Unfortunately, I don't remember much of the gossip I gathered, so you will have to get it direct from him.

"In Ionia, Mich., I tried to look up 'Morey' Spaulding, IV, only to hear that he is now located somewhere near Los Angeles, and is, I believe, also practicing architecture on his own. Foster, XI, and Ted Hine, IV, are in Detroit as is P. G. Baker, but what they are doing, I don't know. The last two are officers of the Tech Club, which meets in the middle of the week, while I am in Cheboggan, or some other fiendish place. I hope to connect with some of them, sometime, and that is about as definite as I can make it.

"Last, but by no means least, I now boast two husky boys, one aged twenty-one months, the other two months, either of which I will match against anything else the class can show at their weight."

We are able to give a bit more information on Sandy Claussen's wedding by quoting from the *Boston Transcript* of September 25:

"Miss Florence Sprague Gifford, daughter of Hon. and Mrs. Charles L. Gifford of Cotuit, became the bride of Howard P. Claussen of Hartford, Conn., Saturday evening. The ceremony took place at the home of Mr. and Mrs. Gifford at Cotuit.

"Mr. Claussen, who is a graduate of the Massachusetts Institute of Technology, is a member of the Phi Gamma Delta fraternity. In the winter of 1917, he served as a lieutenant with the United States Naval Aviation forces in Europe, and for a time was on the staff of Admiral Sims. He is a member of the Belmont Springs Country Club and the Engineers Club. Miss Gifford attended Mount Ida School and Wheaton College. Following a motor trip to Canada, the couple will be at home to their friends after December 1, at 549 Eliot Street, Milton."

If you men of '16 don't intend to back the Secretary up with information for the Review, you had better get another Secretary.

1917

RAYMOND S. STEVENS, *Secretary*, 30 Charles River Road, Cambridge, Mass.

The last Review made us wonder whether these notes were necessary in our case—for Seventeen would have been preponderant without them. Lobby is to be congratulated on the general excellency of the first issue in the new style, an issue that certainly typifies a progressive Technology. Continued progress must mean an Alumni Magazine leading the field in physical make-up, in meaty content, and in influence among an influential body of readers.

But we shall plod along with the notes, even if we have to use our imagination occasionally because of a dearth of news and correspondence. You are given fair warning that if we are not informed directly, we can not be held responsible for accuracy of detail. If your demise is announced, it will probably be because you have given us no reason to think otherwise, and Mark Twain come-backs will be published only at our discretion. When you do write, remember that while brevity is the soul of wit, your letter need not be witty.

The newer classes have a course Secretary system that has its advantages, but a source of information has developed in the case of course XV that is almost as good. Dr. Dewey's organization keeps in close touch with many of his graduates, and he furnished the following choice items. Any similar collections should be brought to our attention.

Alvah Moody was with the Great Western Sugar Company, Brush, Col., for a time on general engineering and as an assistant to the superintendent. He is now assistant engineer for the Western Pipe Line Company at Casper, Wyoming. They are constructing a forty-five-mile pipe line, and expect to start operating very soon. Piso was married in 1918 and has one child.—H. E. Strout, XV, is with the California Packing Corporation at San Mateo, Calif.; Canned Fruits, Vegetables and Dried Fruits. — Dud Holden, XV, is Vice-President and Secretary of Jackson, Cook and Co., which handles sash, doors, blinds, etc. This is a new company which got under way in June and which has been very successful, due in part to Dud and in part to the remarkable building year. They have a warehouse in Chelsea and offices at 85 Canal Street, Boston.—Howard Mann, XV, is in Birmingham, Ala., where he is head of the High School Science Department, and is doing a very considerable bit of outside engineering and vocational training work. It is understood that he intends to make vocational training his profession. He has a three-year-old son and a baby girl.—A. K. Althouse, XV, in the guise of A. K. Althouse & Company is selling coal for various coal

1917 Continued

companies with no sales organizations of their own. He is also interested in the operating end of several mines. (We do not begrudge him his certain rise to affluence, but we wish these operators and miners had let us get our own coal in!)

W. I. McNeill, XV, is in charge of the Cost Department of Procter and Gamble, Ivorydale Plant, at Cincinnati, Ohio. His work has involved the reorganization of the department and the entire revision of its practice.—Everett D. Wells, XV, is now Science Instructor of the Sioux City, Iowa, High School. He was previously with the Sullivan Machinery Company and the Wagner Manufacturing Company, chiefly on sales engineering.—Harry Toole, XV, is planning engineer for the du Pont Fibersil Co., at Buffalo, N. Y. This is one of the E. I. du Pont de Nemours interests. Toole's work is mainly cost reduction through better methods.—S. Munger Means, XV, is sales manager for Cotton Fans for B. F. Sturtevant Co., and has headquarters at 517 Dallas County Bank Building, Dallas, Tex. — N. M. Marsilius, XV, is factory manager of the Woodstock Typewriter Company, Woodstock, Ill., in full charge of engineering, factory, purchasing and office. He has some six hundred employees under his supervision.—Gordon Shand, XV, very recently went with the Warren Manufacturing Company at New York.—S. R. Barrows, XV, is temporarily located at 66 Bessom Street, East Lynn.

Extra! Extra! Dick MacLaughlin now represents bank interests as Treasurer of a large contracting organization in Boston. As this is not the first time Dick has assumed and gotten away with a he-man's responsibility, he was asked how it was done. Mr. MacLaughlin is reported to have made the following significant statement, "There is much in having a Boston baked bean, but there is more in using it."

Our worthy President, the justly famous John M., has accepted an offer from the General Electric Company and is now located at Pittsfield, Mass. We understand that he will pursue research work with them, and hope to have more details by the next issue. Pittsfield is not far from the home town of both John and Mrs. DeBell, the wonderful Great Barrington.—Bill Hunter, X, is off again, this time to South America. He is still with the President Suspender Company. His last trip was to Australia, where he established a manufacturing branch.—Bill Gray, III, dropped in from Oklahoma, on his way to the Hartwood Club at Hartwood, N. Y., for a little hunting with his father.—Lucius P. Hill, XV, has returned to the Boston Belting Company, and plans to take up sales work, particularly among paper mills.

Paul Gardner apparently has plenty to do in his particular branch of engineering. We had heard much talk of this Course XVI, but frankly did not expect that a classmate would be the first practitioner. He sends a short but interesting letter—

"Many thanks for your letter and all the interesting enclosures. I should have answered it sooner but it went away out to California and was then forwarded to me here. Would it confuse your files if the above address were used for the winter months and then my California one in the summer?

"Do extend my congratulations to Lobby on his election as Editor of the Review; I do not know of anyone who could fill it more capably.

"I was sorry not to have made Boston for the reunion, but was tied up here in Washington until late in June. Better luck next time.

"My Studio here is flourishing and the work is interesting. If you know of any of the boys who are here in Washington, do tell them to look me up. I personally seem too busy ever to do any hunting about myself. I hear from Jimmy Wallis quite often—suppose you know that he is in Japan. Seems to like the place very much and is evidently doing well for the Sullivan Machinery Co."

Edwin M. Woodward writes from 206 Market Street, Xenia, Ohio: "I just wanted to let you know that within the last month two things have happened to me, namely, that I have given up my architectural aspirations and by reason of that, my address has been changed to the above. I'm now assistant works engineer for the Hooven and Allison Company, Manufacturers of Twine and Cordage, and am learning the business of rope and twine making."—Other architects stick to the profession. Stanley Bruce Elwell and Robert Murray Blackall announce that they will associate in the practice of architecture under the name of Elwell and Blackall at 44 Bromfield Street, Boston. "Stanley Bruce Elwell formerly of Grandgent and Elwell."—Neal Tourtellotte was married in Seattle on October 26, to Miss Janet Elizabeth Powell. He wrote Lobby: "Starting on my new job the first of the month. Sort of assistant general manager of a small local factory. We make all finely ground products such as calcimine, whiting, putty, dyes, etc. It looks like a real opening. Present owner and manager has so much business, due to growth of trade, that he just has to have a young man step in and carry some of the detail."

Bob DeMerritt dropped into the Home Office during the month, after his return from the Canal Zone. He is still in the army as a Captain of the Coast Artillery.—A telegram from Paul Leonard at Maplewood, N. J., announces the arrival of Nancy Leonard, weight 7 pounds 14 ounces, on the morning of October 24.

Our curiosity was aroused by this clipping from the *Springfield Republican*—

"The Springfield Art league will hold the first of its regular monthly meetings, which are planned for the coming year, tomorrow night in the upper hall of the public library.

"J. B. Woodruff who is directing the work of the city planning board will address the league on "The Relation of the City Plan to Work and Life." His talk will be illustrated with charts and photographs of the planning board's work here in Springfield and should prove especially interesting at this time.

"The speaker is a graduate of the Massachusetts Institute of Technology and has been specializing in this sort of work during the past three or four years, both here and in West Springfield."

Who was this J. B. Woodruff, and if he could do all this, why hadn't we seen signs of it before? We put Watson on the job and he not only proved that he had seen signs of this man's work, but he obtained a full confession from the culprit. Here it is:

"In the first place, let's find out just who I am and whether I'm not myself or just the fellow who thinks he's me.

"Do you remember that hatchet-faced, skinny, tow-headed Joe Battis, II, approx.? Well that's me. Enclosed card shows how it was done.—Like F. Smithkinton Hopp or was it Ernest Seton Thompson, and other noted writers, engineers and artists, when they get to be about thirty, and have tried about every kind of job they can think of — written several less than mediocre papers, and made numerous bad guesses on the slide rule, they suddenly decide to change their name, turn over a new leaf and start life fresh. I have noted the same tendency in residents of the 'little stone house' up the Hudson. The process is called assuming an alias.

"Mine was an extremely clever and entirely baffling one. I deftly changed my name from Joe Battis to Joe Battis Woodruff, thus completing throwing everyone off the scent, who had known me previously, and stepping out into the now unsuspecting world I began practicing my profession anew.

"Practicing a profession is like practicing a violin. It takes harmony to make it bearable and I can truthfully say that up to this year there was something wrong with the stringing.

"I am now with a firm of consulting engineers and have been actively interested in city planning work in the Springfield District, and now have charge of the work in Springfield and West Springfield. I suppose you are interested in city planning. If you're not, you ought to be, for it is the kind of work that is going to make us live longer and happier in the congested places that modern business demands that we inhabit.

"Our work here has been of a very complete, extensive nature. We have studied in minute detail every problem of the city's growth from the program for future construction of schools to the design of a complete traffic thorofare, parkway and minor street layout for the city when it has doubled in population. City planning is not tying pink ribbons on lamp-posts. It is the scientific arrangement of every detail of the city's makeup so that each and every part shall have the greatest opportunity to expand in a healthful, economically sound way. It is a business proposition. If after a study of traffic accidents throughout a community, resulting in a rerouting scheme plus a physical change in the worst traffic intersections, twenty lives can be saved a year. I'll say the thing pays dividends, what do you think?

"Springfield now has before its City Council a Zoning Ordnance drafted by our organization which affords protection to the property owners against the invasion of unscrupulous neighbors.

"Some day I'd like to tell people about the work that has been done here, because it is the kind of thing cities of today can't afford not to have. I'm not a salesman, but I believe in city planning enough to want to see its advantage appreciated. I would like to see anyone interested in city planning at any time, and would take great pleasure in showing him the work we are doing. I am located in the Municipal Building, Springfield, Mass."

1919

PAUL D. SHEELINE, *Acting Secretary*, 19 Congress St., Boston, Mass.

This is the first opportunity that the Class of 1919 notes have had to appear between the covers of our new Monthly Review. We all approve heartily of the change, for it will now be possible to have a Review whose reading matter is up to date and which can reasonably be expected to arrive before old age has set in. We are all behind the Review and the Class of 1919 takes this opportunity of expressing its best wishes to the Editors for a successful and gratifying year.

Since our last notes appeared, we have been unfortunate in losing the services of our most able and likeable Secretary, Gene Smoley, whose letter of resignation is printed in this issue. Gene has worked hard and accomplished much during his term of office and his loss will be felt in more ways than one. He feels that business duties will prevent him from giving the time to the secretaryship which this office, in his estimation, requires.

"It is with great regret that I am forced at this time to lay down the Class 1919 pen and wallet after having served for four years since graduation. It has been a pleasure to me to do this work and I shall continue to read the Review notes with a good deal of interest.

"The statement below of the 1919 funds shows a balance of $385.47 to the good.

"As I am at present located in Pennsylvania, I feel that my resignation will be of advantage to the class, as it is better to have our Secretary located in the vicinity of Boston or New York, and I am sure the newly-elected one will perform the duties as well if not better than they were performed in the past.

"In concluding, I want to express again my regret in saying good-bye. I'll see you all at our reunions. Best wishes.

Yours for 1919 and M. I. T.,

E. M. Smoley,

Secretary."

1919 Continued

FINANCIAL STATEMENT OF CLASS OF 1919
January, 1919 — September, 1922

RECEIPTS

Institute Committee	$300.00
Dues from Class	225.00
Class Fund	27.59
Interest	10.97
Total	$563.56

EXPENDITURES

Deficit Class Banquet	$ 35.19
Printing Notices, postage, stenographic and clerical work:	
For year 1919	7.00
For year 1920	7.50
For year 1921	18.45
For year 1922	60.46
Questionnaire Class	49.49
Total	$178.09
Balance on hand	385.47

Submitted September 1922 as a final statement,
by E. R. Smoley,
Treasurer.

The monthly dinners which take place on the first Tuesday of every month at Louis' Cafe, in Boston, still prove to be very popular and each dinner sees more new familiar faces. Among those who have attended some, or all, of these get-togethers are:

Max Untersee, Art and Irv. Kenison, Henry Whiton, George Michelson, Bob Bolan, Paul Sheeline, Ed Pierce, Hyman Selya, Jesse Stan, Roger Leland and Harold McIntosh.

For a change during the heat of the summer one of the dinners was held down at Nantasket Beach. All those who attended claim to have had a good time.

Bob Bolan who has been imparting some of the wisdom learned at Tech to aspiring youths on the Pacific Coast has now taught them all that they will ever know, so he has returned to Boston and is now with the Merrimac Chemical Company.

Recently, while strolling through the Institute, who should we come upon but that "long drink" Webb Shippey. Surprise is no word for it, but here's the story. Webb, when last we heard from him, was teaching nurses how to ride "Somewhere in France." When he came home, he went into the lumber business in Chicago. After three years of that, he has somehow amassed enough of the wordly goods to return to the Stute and Course IV. It is hard to keep a good man down and we wish you luck in getting the old sheepskin, Webb.

The following letter came to hand the other day from K. P. Hu who has been in Pekin, China, since graduation.

"You may be interested to know that I am on a travel tour through the States and Europe. I landed a week ago and will go to Chicago, Cleveland, Pittsburgh, Washington, D. C., New York, Ithaca (my brother is there), Buffalo, Troy and Boston, then New York again, taking the boat for Europe from there. I shall be in Boston about October 10 and certainly hope that you are still there so that I'll have a chance to see you. Please leave your address at Tech so that I may know where you are."

Unfortunately, K. P. had to sail earlier than he expected and was not able to come to Boston, but he wrote saying that he would probably be in Boston at Christmas time.

The class extends its heartiest congratulations to the following benedicts and "benedictines:"

Miss Lena Rhoades of Cambridge was married to William J. Farrisee of Boston. J. A. Collins,'19, was best man.—Miss Inez Vivian Plummer became the bride of Frederick W. Griebel. Griebel is a test engineer at the Blake & Knowles Pump Works in Cambridge.—Miss Helen Cornell Purdy of Port Chester, N. Y., was married to Theodore Dehon, Jr., of Spartenburg, S. C. Dehon is with the Capitol Coal & Transfer Company in Columbia, S. C. — Miss Mary Temple Bradley of Cambridge, Mass., became the bride of Austin N. Purves of Philadelphia. While at Tech, Purves was a member of the Delta Psi Fraternity. He is now with Lockwood Green & Company of Boston.

Frederick Given, who is employed by the Western Electric Company in New York, has just become the proud father of a bouncing young son. — Paul F. Swasey has been made Superintendent of the State Farm and Trade School. —Eugene Mirabelli has recently been appointed building inspector and construction engineer of the City of Boston.—Albert Kaufmann, proprietor of the Malden Hosiery Mills, after having installed modern equipment in his plant, is now manufacturing hosiery at 87 Bryant Street, Malden.

Word has just been received from Marshall C. Balfour that he has been engaged by the Rockefeller Foundation to have charge of malaria work with headquarters in Montgomery, Ala. Balfour recently arrived from Europe, where he was in the service of the Red Cross in regard to typhus and sanitation. He was stationed at Geneva, Switzerland, but had been in many places in the service of the Red Cross and he is considered an expert in that line.

Prof. Israel Maizlish is to return West to complete his studies for the degree of Doctor of Philosophy at the University of Minnesota. Professor Maizlish, until recently, has been teaching mathematics at Reed College, Portland, Ore. — Harold F. Marshall is now the Advertising Manager of Dwight P. Robinson & Co., Inc., engineers and contractors.

1919 Continued

"By order of the Superior Court of the County of Hartford, I have changed my name from Louis J. Goldstein to Louis J. Grayson. Grayson's address is 305 White Building, Buffalo, New York.—Robert R. Litchiser, 2289 North High Street, Columbus, Ohio."

Mr. and Mrs. David S. Johnson announce the marriage of their daughter, Beatrice, to Mr. Arthur Sanborn Johnson, Ipswich, Mass.

The Class of '19 welcomes to Associate membership in the Alumni Association:

Oliver D. Burton, Chemical Engineer, 236 Sisson Avenue, Hartford, Conn.

1921

R. A. St. Laurent, *Secretary*, 754 Morton St., Mattapan, Mass.

Carole A. Clarke, *Assistant Secretary*, 528 Riverside Drive, New York, N. Y.

During the past few months your Assistant Secretary has personally written several hundred cards to members of the class with somewhat discouraging results. A very small percentage answered the request for information, but those who did responded well, and gave some news of their classmates. Fellows, these notes are what you make them,—won't you take it upon yourself, each of you, to gather as much news as possible and send it in four times a year. That isn't much to ask if you stop and consider that a Secretary would have to write to over 1500 men and each of you would have to write only ONCE! 1921's slogan is still DO IT NOW! So whether you have or haven't received a card, sit down NOW and drop us a line, and once you do it, get into the habit of wasting a cent on us four times a year by filling out one of the little green-stamped cards which Uncle Sam serves at all the post offices. We thank you. CAC.

It is with a feeling of greatest sorrow that we record the loss of two members of 1921. It is only a year and a half since our class left Technology to tackle the world, but in that short time we have suffered the first depletion of our ranks.

William Henry Irwin, XV, son of Mr. and Mrs. James C. Irwin of 43 Highland Ave., Newtonville, Mass., died Oct. 17, 1922, in the Volunteer Hospital, New York City, of injuries received in an automobile accident. Bill was born in Albany, April 28, 1901, and prepared for the Institute at the Newton High School. He was widely known at the Institute as a student and a leader in undergraduate affairs. He was a member of Pi Delta Epsilon, Stylus, the class day Committee, and an Assistant Editor of *Voo Doo*. Bill saw service at the first Plattsburg training camp during the war, and was retained as instructor in the second camp for proficiency in bayonet drill. Last year, Bill entered the employ of Harris-Forbes Co., New York, as a bond salesman. To his parents, sister, and brother, J. C. Irwin, '19, we extend heartfelt sympathy.

Knud Y. Moller, X, of Copenhagen, Denmark, was killed by a Missouri Pacific passenger train in St. Louis on Oct. 20, 1922, according to a telegram to V. O. Homerberg, X, at the Institute, from Richard D. Hatton, Vice-President of the Laclede Christy Clay Products Co. of St. Louis. Knud had been with the company for two months, and had made good at the start, having been promoted to assistant engineer when he met with the fatal accident. He will be remembered by '21 men as a brilliant student and his loss will be felt by all those with whom he came in contact.

The following notes have come in answer to our questionnaire:

"Mr. and Mrs. Humphrey Schofield Sinnett announce the marriage of their daughter, Margarett Allen, to Lieut. Harold Oakes Bixby, United States Army, on June 27, Bailey Island, Maine." So ran the first of a number of similar announcements received in the last few months. Yessiree, these mechanical engineers certainly are fast and efficient workers. Bix is stationed at Fortress Monroe, Va., but we bet our old straw hat the OW won't let him sit up at the key all night any more! Hearty congratulations and best wishes, old man.

W. R. Barker, XIV, writes: "In response to your card, my address is 5455 Bartlett St., Pittsburgh. Not married, but you never can tell—the boarding houses are terrible in Pittsburgh!

"I am working for the Harbison-Walker Refractories Company in their Correspondence Dept., with the view of getting into the Sales Dept. eventually. I like the work very much, am working hard, and the President's chair still looks a long way off. A. A. Turner, I, is on about the same work that I am and I see him every day. F. B. Kittredge, I, is in Pittsburgh—his address is 7221 Thomas Boulevard. Frank is working for McClintic Marshall Company and likes his position greatly. We get together once in a while and have a bull session or try a little Bridge. D. G. McAllister, VI, is out at Westinghouse and I have seen him once or twice.

"There is supposed to be a Tech Club in town, but it is defunct, I think. When opportunity presents I hope to stir up something, if nothing more than a luncheon or two. The former Secretary is no longer in town, I believe—anyway, I spent a weary few hours trying to see him."

A. E. Bachmann, X, is still with the Pjepscot Paper Co. as we glean from his letters to Doc Smith at the Western. Red's address is Lisbon Falls, Maine.—E. W. Booth, IX–B, is assistant to the consulting engineer of the New England Oil Refining Company of Fall River, Mass., and is living at 484 Beacon St., Boston. Scripps reports the marriage of E. P. Clark, II, on October 14; Ed is in the Plant Engineering Department of the New York Telephone Company at 104 Broad St., New York City. He also says

1921 Continued

J. A. Kelley, '18, is with the New England Oil—January Review please copy. No matrimony as yet for our eminent thespian-engineer—at least he wouldn't admit that much to stenographer "C"!

A. H. Aronson, V, is in the manufacturing game, having been admitted as a member of his father's firm. Writing from 82 Howland St., Roxbury, Arry sent us the following dope:

"E. T. Adams, V, has spent a year in biological research at Wistar Institute in Philadelphia, and is now at Harvard Medical School working for a Ph.D.—M. M. Green, V, contracted a life partnership last June with Miss May Gold of Cambridge.—Manny is an assistant in Chemistry at Technology.—K. H. Pratt, V, is after a Ph.D. in mathematics at Harvard.—P. W. Griffith, V, received his S.M. in chemistry last June.—Pete's present whereabouts unknown.—Juntaro Kawai, V, was married last year in Japan. He has left Yamashita and Company of Tokyo to assume complete control of the instruction in chemistry and physics at a newly-founded college in Japan.—D. W. Kitchin, V, has been reported at the Bureau of Standards, Washington, D. C.—Arry wants his address and so does your Secretary."

L. P. Botting, IV, is in the office of Robert D. Kohn, architect, 56 West 45th St., New York City, working on the new building for R. H. Macy and Company. Len suffered a physical collapse after enduring summer school and graduate work during the fall following 1921's exit from the Battle of the Charles. We are glad to chronicle his complete recovery, and also that he is a member of the Atelier Hiron, taking Beaux Arts work as preparation for a try at the American Academy in Rome and perhaps the Paris Prize. Len lives at 315 East 21st St., Brooklyn, N. Y.

R. G. Burr, VI, dropped in at the Western Electric to see your "Ass. Secretary" (to cop Wallie Ross' favorite joke) during the first week of August before leaving for Ponce, Porto Rico, whither he has been sent by Messrs. Stone & Webster to show one of their railway, light, and power operating companies the latest and approved methods of making meters behave themselves where it's 125 degrees in the shade on a cool day! Apparently, Reggie wants to be sure of his place in Heaven—anyhow, he's doing his darndest to get his hell on earth.

L. B. Barker, II, whose address is care of Brown, 320 South Ave., Wilkinsburg, Pa., writes: "Received your card some time ago, but the following is all I have to offer. I joined Westinghouse last November, after having waited all summer for the call to labor. Until March, I was in the shops at East Pittsburgh, but by that time I had decided to take up industrial heating, and so it was that I was hustled off to Mansfield, Ohio, to acquire knowledge of all kinds of heating apparatus. In April, I moved to South Bend, Ind., to study street and industrial lighting equipment. The next stop was Newark, N. J. The Newark plant is responsible for our meters and electric fans. I returned to East Pittsburgh in June and went to the test floor where I have been ever since. If all goes well I shall attend the September Sales School and graduate from the course on the first of October.

"C. E. Thornton, VI, and D. H. Hatheway, VI, are the only other M. I. T. men in the course that I know about. I understand they have written to you. (Note: Thornton, yes; but Hatheway's failed to answer two cards!) K. C. Li, II, is an engineer with the Lam, Glines & Co., of 4B Peking Road, Shanghai. Casey's work consists of teaching his fellow countrymen how to use American agricultural machinery—the line comprising everything from lawn mowers to high power tractors. It would be interesting to have a literal translation of the conversation involved when he initiates a native of the interior into the mysteries and intricacies of a Ford tractor. M. B. Burckett, VI, is at 36 Eighth Ave., Newark, N. J. Am neither married nor engaged nor even sitting on anybody's front porch. Hope you are the same.

"Lastly, I want to tell you how much I have enjoyed the 1921 section of the Alumni news. You are rendering the class a splendid service, and they will be an ungrateful bunch if they don't appreciate it." (Wish the rest of the class thought so and would answer those cards!)

L. O. Buckner, VI-A, and P. T. Coffin, VI-A, are in Albemarle, N. C., with the Phœnix Utility Co., constructing 125 miles of 110 kilovolt transmission line for the Carolina Power Co. They are co-ordinating the work of the engineering and field forces and seem to be enjoying camp life.

Mr. and Mrs. David Brown announce the marriage of their daughter, Betty, to Mr. William Wolfe Brown on September 3 at Boston, Mass. Again proving the speed and efficiency of the mechanical engineers! Bill has left Malden to tackle Telephone Systems Engineering of the Bell variety, and is now with the Engineering Dept. of the Western Electric Co. He and the Mrs. are living at 10716 112th St., Richmond Hill, L. I., N. Y. Other 1921 products in the Western Electric Engineering Dept. at 463 West St., N. Y. C., are E. W. Olcott, VI, and W. L. Knoepke, VI, Systems Engineering; E. R. Haigh, XV, Chemical Research; R. E. Waterman, X, Physical Research; R. W. King, VI, Physical Research; and C. A. Clarke, VI, Telephone Transmission Research and Engineering. Your Assistant Secretary would like to tell more of Randy Haigh and his doings in Greenwich Village, which is quite near us, not to mention lots of things about the rest of the bunch, but we have to live with them amicably for the rest of the year.

H. duP. Baldwin, II, says he is a consulting engineer in the office of George W. Hubley of Louisville, Ky., and is living at 1461 Fourth Street. Baldy's work consists of appraisals and power plant inspection, the latter a regular service rendered to a number of concerns. As for the girl question, we are asked, "Did you ever hear of a man following the engineering profession who made enough money to have one? As for my hopes I won't say; however, I can assure you it will be a long time before the smokes are on me."—A. M. McMorran, II, is reported with the Johns-Manville Co. in New York City.

I. D. Jakobson, XIII, is in his father's shipyard in Brooklyn, N. Y.—R. F. Officer, XV, is also in New York — whereabouts unknown.—G. S. Piroomoff, II, is at Technology as an assistant to Professor Fuller.

E. D. Clarkson, II, writes from 4504 Kingsessing Avenue, West Philadelphia, Pa., to say he is assistant process foreman with the Atlantic Refining Co. Dewey's work is in the cold settling plant, where oil is cooled and settled by refrigeration machinery. Anent the matrimony question, he chirps gloomily, "I couldn't even buy a diamond if they were sold in the 5 and 10!" From Dewey's letter we glean that L. D. Chellis, II, is working in a consulting engineer's office.—E. F. Praetz, II, is in the research department of the Saco-Lowell shops.—C. H. J. O'Donnell, II, is with the Frederick Iron and Steel Co.—C. W. Hammond, II, has left the General Electric Co. to go with the Worthington Pump Co.—George Schnitzler, II, is with Professor "Hysteresis" Hollnagel in the Thomson Research Laboratory of the General Electric Co., at Lynn, Mass.—T. J. Campbell, II, is also with the General Electric.

T. P. Campbell, XIV, 1075 Pennsylvania Street, Denver, Colo., writes, "Am at present working with my father in the real estate and investment business. Beginning about December 1, I will be with the Radium Company of Colorado as research engineer.

"Am married and have one child, a son, Dick, three years old. There are few Tech men out this way but hope to get in touch with them as soon as the usual summer vacation exodus is past. About the only news of '21 men I have concerns K. A. Moores, XIV, who is with the Illinois Zinc Co. of Peru, Ill., in the capacity of technical control engineer. He is married, but has nothing to show for it as yet.—O. W. Clark, XIV, was with the Pacific Mills last spring.—A. J. Johnson, XIV, the Gloucester Cod Fish Ball, is still with the New England Telephone and Telegraph Co., as far as I know.—M. S. Vallarta, XIV, the Senator from Mexico, is going back to Technology this fall to get his Sc.D. He says that Mexico is not a very healthy place to travel—beg to agree!"

J. R. Carter, VI, tried the electrical end of a mill construction job, and Jackson and Moreland before settling down in the Beantown office of the American Woolen Co. Jim's work concerns the laying out and installing of power house equipment, street and office lighting, and mill power and lighting systems.

L. D. Chellis, II, is with Clyde R. Place, doing consulting work in heating and ventilating, electrical and sanitary engineering, and making plans or layouts for all kinds of structures for hotels or manufacturing plants. Larry writes: "They give me quite a bit of rope, so I can do a little engineering once in a while and take the responsibility. I've got hopes yet of being an engineer.

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Laighton Evans, X, is assistant director at the Buffalo station of the Institute's School of Chemical Engineering Practice, and is living at 338 Summer Street, Buffalo. Riot tells us that J. W. Gartland, X, and X-A is at the National Carbon Co., Niagara Falls; E. W. Haywood, X, is a foreman of the benzol plant at the Lackawanna works of the Bethlehem Steel Corporation.—F. E. Huggins, Jr., X-A, is with the Buffalo Forge and Foundry Co.

G. H. Easton, XIII-A, 274 St. John's Place, Brooklyn, N. Y., is a Lieutenant, Corps of Constructors, U. S. N., and is assistant superintendent, in charge of new construction, at the Navy Yard, Brooklyn, N. Y. Glenn had charge of the installation of the Sperry Gyro Stabilizer on board the U. S. S. Osborne, having taken special courses at Columbia and Clark Universities in conjunction with the work. As assistant laboratory superintendent of the Navy Yard, he will continue this experimental and research work and also conduct tests for the Bureaus in Washington. Glenn is married and has a boy of three and a half years and a girl of six months. With him at the Brooklyn Yard are H. N. Wallin, XIII-A, and W. A. Sullivan, IV, '17.

H. P. Field, VI, has fallen — look it! "Dr. and Mrs. John Scott Boyd Pratt announce the marriage of their daughter, Catharine Hale, and Mr. Harry Peyton Field, on Saturday, September 2, 2048 Nuuanu Avenue, Honolulu, Hawaii." Prior to the culmination of this romance of Smith and the Stute, we received a letter from H. P. Field & Company, Box 57, Windham, N. Y., in which Harry said he was writing on the train returning from Virginia and we would therefore have more trouble than usual in reading it — "even more than after a trip to the Lenox Grill," whatever that means? It seems he has organized a $25,000 public service corporation which built a 12-mile transmission line to the Upper Hudson Electric Co., and also ran an electrical contracting and supply business which wired up most of the buildings in the three villages supplied by the line. The juice was turned on and the towns went wild, but H. P. thinks he may go back to the Power and Mining Department of the "Generous" Electric after the excitement subsides. Best wishes, OM.

G. E. Fargo, IX-B, is taking the two-year graduate course in Business Administration at Hahvud, where he reports Benjamin Fisher, Jr., II, with him, W. P. Corbett, II, having left. Glenn roomed with J. T. Rule, XV, who is in the graduate school of Arts and Sciences. To fill the business experience requirement, Glenn installed a statistical system for the *Cleveland News* last summer. Wish he had worked for *The Tech* instead of the T. C. A.!

R. C. Fisher, VI-A, traveled West in a Buick with E. L. Rose, VI-A, and R. S. Wetsten, VI-A, through Yellowstone and Rainier National Parks to his home in Tacoma where the party broke up. Ray is now in the Transmission and Protection Department, San Francisco office of the Pacific Telephone and Telegraph Co.—Ted is a researching assistant under Professors Bush and Dellenbaugh; and Wet is with the Public Service Corporation of New Jersey. Tnx, OM!

H. I. Granger, VI, who is "not engaged or otherwise hampered from hitting the high spots" when he wants to, corrects our last entry with, "The 'hydro job in Conn.' was in Vermont, and I was a civil engineer on that job." But Harry's willing to let bygones b. b. now that he's flivving all over New York State to the 70-odd stations of the United States Geological survey making river discharge measurements, checking gauge data, installing automatic gauges, etc. He can be reached at the offices in Albany, N. Y.

R. H. Gilbert, VI-A, wanted to go so far from Cambridge he beat it to England, France, Germany, and Switzerland before cooling off. Fish has landed with the New York Telephone Co. at 104 Broad Street, New York City. The Plant Engineering Department already contains S. J. Hill, X, and E. P. Clark, II. Sumner Hayward, X, and C. B. Nelson, XIII, who was recently married; Mt. Vernon (N. Y.) Plant, E. I. Howard, XIII. R. H. Wallace, XIII, has returned to Boston where he is with the New England Telephone and Telegraph Co., 50 Oliver Street.

J. A. Grimmons, VI, is still with Malden Electric Co., a dependent company of the "Tenney Service" learning the practical side of light and power distribution. Address, 72 Thurston Street, Winter Hill, Mass.—Hartwell Flemming, VI, is assistant superintendent of Transportation of the United Electric Railways Co. of Providence, R. I., where he's bossing a gang and thesising on traffic and transportation subjects and getting fat doing it. He reports: "J. L. Entwistle, VI, has accepted a job in the electric railroad department of the Westinghouse Electric.—G. O. Frederickson, VI, is an inspector for the Underwriter's Laboratories, address Box 1010, Providence. —J. J. Collins, I, and D. E. Kepner, XI, are also in Providence.—W. J. Farrisee, I, has married Miss Lina Rhodes."—Hartie didn't give any more dope on this important event and Bill hasn't written. Hartie lives with Collins at the Y. M. C. A., Providence.

E. L. Harlin, VI, 5859 Cobbs Creek Parkway, Philadelphia, did some highway construction out in ol' Mizzou before landing with the equipment engineer, Plant Department of the Bell Telephone Co. of Pennsylvania.—B. M. Mills, VI, is with the General Electric at Schenectady but hasn't sent his address.—Write him at 48 Crescent Street, Rutland, Mass.—C. E. Thornton, VI, Westinghouse Electric, is living at 617 Hampton Avenue, Wilkinsburg, Pa.—P. B. Wendler, XV, is with the Eddystone Manufacturing Co. at Eddystone, Pa. Bob invites anyone coming to Philly to call him up

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at Official 0050.—P. H. Hatch, VI, is with the Cleveland Union Terminal Co., a New York Central project to electrify the Cleveland terminal, and is living at 1789 East 86th Street, Cleveland, Ohio.—D. C. Jackson, Jr., VI-A, is an instructor in the Department of Electrical Engineering, University of Missouri, Columbia, Mo.

L. R. Janes, VI, is a research artist at the Stute on the problem of how much power can be transmitted over cables before they drip copper and lead, and we hope he stays in Cambridge after he cut us out with the little Barnard girl.—W. C. Kohl, VI, and G. W. Spaulding, VI, are back from St. Louis and will be instructors at the Stute next year.—E. G. Farrand, VI, is still with Paul H. Davis & Co., 39 South La Salle Street, Chicago, selling securities.—D. M. Burckett, VI, got his S. M. and started to hike to Montana. What's Doug's address and what's he doing? Love to Jimmie from Ruth!

S. M. Jones, VI, also "S. M." last June, has decided to bohunk it for a while with the Alabama Power Co. on the inspection of the electrical installation of a new 100,000 H. P. hydro-electric plant they are building. Murray drove down South with Professor Dellenbaugh last summer in the latter's Hudson to play with transients and harmonics on a 110,000 volt line, and seems to like Alabam'.—H. L. R. Kurth, VI, is Chief High Poo-Bah for the Doble Engineering Co., cheating the phone companies by talking over high-voltage lines. Chick dropped a bomb in our camp with the following: "Mr. and Mrs. Julius Pawlowski announce the marriage of their daughter, Frieda Dorothea, to Mr. Henry L. R. Kurth on August 20 at Cambridge, Mass." He and the Mrs. live at Suite 17, 27 Astor Street, Boston. Congratulations and best wishes.

H. S. Kiaer, XV, writes from Nedre Ullem, Bestum, Kristiania, Norway. "After my graduation from Tech in '21, I went directly to Norway. In September, I started to serve in the Army, this being compulsory, and stayed in service until March of this year. For the last months I have mainly been occupied with the study of French, as I expect to leave for France in six or eight weeks. I have the opportunity of getting into the De Dion Bouton Automobile Co. near Paris, and am going to start there as a volonteur. Later, I may get a paid position. However, the main thing is for me to get experience.

"As to other M. I. T. men, there is really no news about those with whom I come in contact, as they have not yet succeeded in getting permanent positions. This is owing to the fact that practically the whole industry in Norway is at present producing very little as compared with the normal output, so there are more engineers than actually needed."

W. W. Kittredge, I, is assistant engineer in the designing office of the Water Supply Board of Providence, R. I., constructing the new Scituate storage reservoir. He reports D. E. Kepner, I, working for the Sanitary District of Chicago. First time we knew it was! We welcome that announcement, Kitt; meanwhile, we'll tell the gang to look you up at 661 Westminster Street, Providence.

P. B. Kimball, VI, 2276 Creston Avenue, New York, N. Y., taught in a Dayton High School and inspected for the Underwriter's before accepting a job as assistant to the electrolysis engineer of the New York Central Railroad. The way we solve Perley's matrimony cryptogram he was married in September. Right? He tells us J. J. MacNeil, VI, is in Mexico. Where and what doing?

J. G. Lee, II, makes some nasty remarks about us in re *The Tech*, which has caused us to start the preliminary drafts of a few communications and edits on the rotten ticket sales for next year's production of Tech Show. J. G. worked for the Gallaudet Aircraft Corporation, then got his S. M. for graduate work at the Institute in Aeronautics. Last summer, he was in the calculations section of the Naval Aircraft Factory in Philadelphia, with D. T. Brown, II. Hope he doesn't foist any more Shows on an unsuspecting group of undergraduates when he returns to teach in Aeronautics at Technology this year!

Stuart Nixon, XV, is still with Continental Motors Corporation, and can be reached at 111 Houston Avenue, Muskegon, Mich. Stuie says E. R. Hermann, II, is designing engineer for the Star Watch Co. at Ludington, Mich., where he lives at 716 East Ludington Avenue. He has failed to find H. B. Tuthill, XV, who was reported at the Oliver Machine Co. in Grand Rapids, Mich. Where are you, Tut?

"I ran into W. A. Brolin, Jr., II. He's with Durant Motors at their Elizabeth, N. J., plant, making layouts in their production department. I think you can reach him at 40 East 40th Street, New York City. Met H. O. Bixby, II, last winter in a First Lieutenant's uniform, C. A. C. He was then at Monroe and said he was having it soft with a colored valet."

T. B. Card, VI, is building transmission lines through southwestern Ohio for the Dayton Power and Light Co., and is an instructor of electricity on the side in one of Dayton's night schools. Tom says he is having a fine time at the local Technology and Engineers Clubs, but wants to hear from some of the VI men, especially his thesis side-kick, Doug Burckett. Ye Scribe would also like to hear from Burckett.

R. B. Crawford, XIV, is a cost estimator for W. L. Fleisher and Co., Industrial Engineers who specialize on air conditioning, spray drying, automatic sprinklers, and power plants. The chief engineer is R. E. Keyes, II, '07, and the staff includes S. W. Fletcher, II, '18, W. J. Kilpatrick, VI, '20, and A. P. Poppereff, XV, '22. Bob is living at the Chi Psi Lodge of Stevens Tech at 829 Hudson Street, Hoboken, N. J., and says C. A. Norton, XIV, is living near him at the Theta Xi house. Clyde is a patent attorney for the Radio Corporation, has his name on a glass door, directs one half of a stenographer, adorns his own stationery and everything! No wonder radio sets are so expensive! R. R. Whitehouse, XIV, works for the Western Union and hangs out in Bloomfield, N. J.—R. D. Snyder, XIV, is in Hazleton, Pa. Bob says, "He took New York by storm during the Chemical Show, stayed at the Pennsylvania, but ate at the Automat. Roy and I found that our thesis while patentable to the tune of 18 claims was worth very little commercially. G. B. Greely, XIV, is superintendent of a lime kiln at Rockland, Maine. Don't know if any of us are engaged — personally I'm not, although that's not my fault."

F. J. Callanan, VI, is with his father in the wholesale lumber business at Keeseville, N. Y. "It would seem," he writes, "that in spite of all newspaper talk of a building boom that they must be building houses out of everything but wood." Sorry we haven't time to answer all the letters we get, Cal, and the Editors of the Review won't give us the space to follow your suggestion and write an open letter to the public!

W. E. Church, IV, reports himself in the drafting room of the office of George W. Kelham, Architect, 618 Sharon Building, San Francisco.—W. G. Pigeon, IV, '00, is one of the chief men in the office and a member of the firm, and C. D. Acker, I, '19, is superintending some of the jobs.—A. G. Stanton, IV, and I. G. Smith, IV, are both doing well in the architectural game at 729 Mason Street, Portland, Ore. Walter says that Dudley Farquhar Church, aged nine months in September, is eventually going to land at Technology. Any more sons of '21 in the Class of 1943?

J. R. Curry, II, 4 Forest Street, Lynn, Mass., is conducting air compressor researches in the mechanical research department of the General Electric Co., at Lynn. Justy tells us that T. J. Campbell, II, has been with the General Electric, but is leaving to accept a job as physicist with the Pyrex Glass Co. in New York State.

J. D. Crosby, X, is assistant chemist on footwear in the laboratory of the Hood Rubber Co., Watertown, Mass., and lives at 88 Lake Street, Arlington. Josh indicates he is too busy to worry about matrimony; he says the Hood place is infested with Technologians, among them the following men from 1921: C. A. Breed, X, and R. W. Leach, X, are in the laboratory, H. F. Finch, II, is in the mechanical department, F. J. McGill, XV, is in the standards department, and J. B. Mattson, VI, is in the electrical engineering group.

Albert Calvert, VI, went back to the Stute for his S. M., and is now in the engineering department of the Blackstone Valley Gas and Electric Co. of Pawtucket, R. I., where he is living at 32 Beech Street. Al reports Larcom Randall, VI, still on the Edison Electric Illuminating Co. case in Boston. Attilio Canzanelli, III, writes from 11 Wareham Street, Medford, Mass., that he has been a student at Columbia for the past year, finishing

1921 Continued

premedical requirements, and is now enrolled as a first-year medical student at Tufts College, where he expects to remain for the next four years. Some ambish!

A. R. Davis, X, is assistant chemist in the laboratory of the Firestone-Apsley Rubber Co. at their Hudson, Mass., plant. Jeff can be reached at 47 O'Neil Street, Hudson.—Vladimir Dixon, II, says, "Since I left Tech I have been on a short visit to Europe and have been a year at Harvard, where it was my good fortune and great pleasure to study under Dr. Harvey Davis of steam table renown. Now I am working for the Singer Sewing Machine Co., at Elizabethport, N. J." Dick lives at 1025 Central Avenue, Plainfield, N. J.—A. S. Denbin, VI, is still in the Testing Department of the New York Edison Co., and lives at 10119 118th Street, Richmond Hill, L. I., N. Y. According to the dope Adolph sent in, J. E. Buckley, Jr., VI, is now with the Watson-Flagg Engineering Co., a firm of contractors with offices at 120 Liberty Street, New York City, and J. L. Entwistle, VI, who got his S.M. from the Institute last June, is doing further work on his wire testing machines.

W. M. B. Freeman, I, 833 Commonwealth Avenue, Newton Center, Mass., is assistant to the sales manager of an investment house in Boston, thereby preventing "a few people being killed by faulty bridges I might have built." Having entered with 1920, Bill says he's going to desert us for Ken Akers' colyum. Better stay with a real live class, old man!

D. F. Lyman, II, is reported in the Estimation Department, Western Electric Co., Philadelphia.—F. W. Adams, X, instructor in Chemistry at Technology.—J. W. Barriger, 3d, XV, at the Pennsylvania Railroad headquarters in Chicago.—C. L. Manneback, VI, got his Sc.D. last June, and we saw him at the Engineering Department of the Western Electric Co., New York, looking around.—Heard J. T. Elliott, VI, of Dynamo Laboratory fame has a wife to boss him around now; anyone know Ted's address? — Hear H. LeM. Schmidt, XV, and R. P. Windisch, XV, have gone into the investment business for themselves with an office on Wall Street.—A. W. Norton, XV, is circulation promotion manager for the Brooklyn, N. Y. *Daily Eagle.*

Met N. F. Patton, XV, in the subway; he's in public utilities with the National City Co. New York City.—F. L. Blewer, IX-B, is still at Harris, Forbes, and lives at the City Bank Club, 6 Montague Terrace, Brooklyn, N. Y.—A. E. Halberstadt, VI, is in the tire business at Delicias, 1437, Santiago, Chile.—A. L. Kerrigan, VI, is a lieutenant, Coast Artillery Corps, stationed at Fort Hancock, N. Y.—C. C. Westland, XV, is reported with the Illinois State Highway Commission.—Cards for J. H. Bayle, II, T. H. Frost, X, and P. P. Sosinski, VI, have been returned; anyone know their addresses?

A. A. Orlinger, X-A, is with The Henry Souther Engineering Co., 11 Laurel Street, Hartford, Conn. Abe is training for chief chemist, specializing in the inorganic and metallurgical department and writes:

"I've been a busy man in my free time, having occupied myself with following the progress of the chemical industry, attending the American Chemical Society and American Society of Steel Treaters meetings and the Technology Club of Hartford luncheons, directing the extension work of my fraternity and getting a fraternity news organ into being, and trying to answer the pile of correspondence which has grown up on my table, and does not seem to be dwindling any."

Mottelson, X, after getting three decent looking jobs, and staying at each as long as the companies lasted, went into a decent looking prospecting venture in Colorado, but that seems to have fizzled also, so the boy is planning to come East. Glad to hear from you A; write again.

Here's news for you! Mr. and Mrs. Frederick W. W. Binns announce the arrival of Frederick Walter, Jr., on Oct. 21, 1922 — weight 6¾ pounds. Hooray for Fred. Another entrant to the Class of 1945. Fred is with the Virginia Smelting Co. in their Boston office on State Street, carrying on plant investigations, trouble shooting and developing new uses for sulphur name is

Thassall for this time, fellows. Now, if every one of you whose dioxide. not mentioned in the foregoing will write to Ray or CAC within the next couple of weeks, we'll have a whale of a pile of notes next issue. What do you say? All right. DO IT NOW!

1922

ERIC F. HODGINS, *General Secretary*, Room 3-209, M. I. T.

The desperate demands on the Review's space have forced the murder of almost every line the gensec wrote for this issue. He is willing to attest that he wrote them, and likewise that they were cast into type. If any sneering cynic doubts this, the gensec will send him galley proofs in rebuttal. The entire blame for the excision rests with the Managing Editor of the Review — a gentleman for whom the gensec has the utmost contempt.

We proceed immediately to the reports of the Course Secretaries, noting as we do so the regrettable absence of George Ramsay, III and XII, whose notes arrived two weeks late.

Course II

J. E. SALLAWAY, *Secretary*

125 Cushing Ave., Dorchester, Mass.

The jottings concerning our classmates listed below have been gleaned from many diverse sources. Credit and thanks are due especially to Miss Carpenter for her kind coöperation in forwarding new addresses and positions as soon as notice reached Professor Miller's office; newspapers, police records, gensec's files and direct communication with the Course Secretary supplied the rest of the dope. The fellows who have written in would be just as glad to hear from those who have not, as those who have not told the world how they are earning a living are to hear from the fellows who have taken the trouble to drop a line. If any one is bootlegging, all information will be treated as strictly confidential.

The Course Secretary was paying a friendly visit to old Alma Mater the other day and ran across many familiar faces, and collected a pile of spare "info" on the class in general, but not much in particular.

The M. E. Department has a strong representation from '22. Bob Haskell, Mal Shepard, Charley Swartz, Benny Cooper, Hasty Hastings are passing on to posterity all that stuff that passed by us in years gone by.

Web Ramsay has been painting the town of Worcester, Mass., all colors of the rainbow for the past few months. He is enveloping the ideas of the United States Envelope Company.—Randall J. Hogan is with the Boston Woven Hose and Rubber Co., Cambridge, Mass.—D. H. Maury, Jr., is serving White Motor Car Co., Cleveland, Ohio.

The Schwamb twins are separated. Bill is chasing the ink for the Factory Mutual Insurance Co., in Boston, while Ed is located at Billerica in the Boston & Maine shops.

The ASME *News* reveals the fact that many of the boys are getting under cover for membership in the Society. The best we can do, however, is to get addresses and occupations.

Alexander F. Popereff, is draftsman with W. L. Fleisher & Co., New York City.—Nathan A. Schneiderman, engineer with Fink & Sons, Newark, N. J.—Gabriel Smith is designing Diesel Engines for the Worthington Pump and Machinery Corporation, Cambridge. Gaby worked for the Blake-Knowles Co. before entering Tech, and they were all fishhooks to get him back.—Greening and Clifford are helping the Goodyear Company in Akron to make better rubber goods. They say that there are many Tech men there, and find things very agreeable and that the alumni welcome the youngsters of '22 in a very cordial manner.—Gus Hemeon is burning his fingers as experimental engineer for the Snead & Co., in Jersey City. Gus wrote a thesis for this company and they liked it so much that they were crazy to have him work for them.—Larry Washington is the guy that writes the editorials for *Power*. Mr. Low signs them. Larry is doing editorial work as News Editor with the McGraw Hill Co. He has some news for the class also. He says he met Colby Bryden around the big burg. Godfrey Spier is working for the Cocoa Products Company of America. At time of writing, Web Maschel was preparing for a trip to India to work with the Standard Oil Co.

Ham Hammond thinks that steam turbines are the most interesting things in the world. He is an engineering apprentice with the Terry Steam Turbine Co., Hartford. They pay good money now, but reduce you after nine months' training to 50% present salary.—Walter Croft is the budding general manager of the T. G. Plant Shoe Co., in Jamaica Plain. He does everything from drilling artesian wells to playing boss millwright. Walter has worked in the T. G. P. before, and knows the ropes. He has been machine-shop foreman for one summer, and assistant in the mechanical department. At this rate, it won't take long for his dreams to come true.—Johnnie Hayes is showing the Queen City Cotton Co., of Burlington, Vt., how to make cotton. If Hayes does not write soon, we will have him as President of the company.—Harry Clemens has been summering in Newark under the administration of the Carrier Engineering Corporation.—Walter Kirley is cracking oil at the N. E. Oil Refining Company's plant in Fall River. Walter was in charge of one shift the last that was heard from him. The world is in front of you, Walter! Kirley gives us some interesting dope on other members of the class. George Dyer has moved to Providence to help the Narragansett Electric Light Company out of a tight hole. If George can't do it, they will need a derrick.

Bill Hyland is located in Worcester and is working for the New England Power Co. Bill wrote his thesis for this company and they thought that they needed his help when they saw how well he tested their turbines for them.—Vin Ring has been proving to his own satisfaction that the map of Europe is correct. Vin went over on the *Majestic* and has not been heard from since.—Ray Burrus found out what real work was this summer in the foundry of the Fulton Iron Works, St. Louis.

Eric Hodgins has the dope on six fellows who bribed reporters to put their write-ups in the paper, and then showed it to the boss.

The *Augusta Journal* hails Al Southam to the faculty of Bowdoin College, Brunswick, Maine, as the Tech graduate who will hold the chair of mathematics for the coming year.—Jim Zurlo gave the dope to the *Milford News* instead of the Review. Jim's write-up says he has a position with the Moore Steam Turbine Corporation, Wellsville, N. Y. He is employed in the testing department, and expects eventually to take charge of it.—Clarkson College boasts of the addition to its faculty of Gordon Croskery as instructor in Mechanical Engineering.—Bill Harris gets his picture and half column write-up in the *Washington Star*. We cannot give it all here, but the most interesting item is: "He has accepted a position with a manufacturing concern in the Middle West." Let's have the dope, Bill.

The Course Secretary has had time between times to spend the summer months in Bristol, N. H., working for the Mason-Perkins Paper Corporation, but the cops got wise to his bluff at plant engineering and ran him out of town. It was a good job while it lasted, but the winters are cold in that country.

Get the dope in hot, fellows, and we can have more detailed notes. Straight addresses do not make very lively reading, anyhow. Don't mention the salary you are getting; it might embarrass the Secretary.

1922 Continued

Course VI

FEARING PRATT, *Secretary*

120 Main St., Hingham, Mass.

Now that the time has arrived for your Course Secretary to write the first chapter in the history of Course VI, Class of '22, after the conclusion of the problem sections, he finds that some are still pursuing the elusive molecule in various parts of the country. Others — and there are many of them — must have discovered the lair of Molly Cule and Eddy Current and are keeping it a secret; at any rate, a secret from your secretary. Those who have not found the time nor inclination to write in for this issue, consider yourselves graded very low, and conditioned until the desired dope is received from you.

Jerry Meir showed the right spirit and was the first one to be heard from, only a few days after graduation. He was probably unable to talk to anyone, so did the next best thing by writing. Jerry says in part: "Besides spending some of my time gazing off at our Newark moon" (what do you mean 'our'?) "in soulful retrospection on the past four years at Tech, I am assistant engineering for the Miniature Incandescent Lamp Corporation. The job is O.K. — it's a nice 'light' job." His address is 95 Eighth Avenue, Newark, N. J.

Tom Tomlinson is connected with Miller and Pardee of Chicago. I had to say "connected" because Tom neglected to say whether he was the general manager or only the president in his letter. His address is 5211 Kenmore Avenue, Chicago.

Some of the gang wanted to be near New York so they could see the "Follies" as they really are. Ev Vilett succeeded in getting as near as Elizabeth, N. J. Ev is a cadet engineer with the Public Service Electric Company. He writes: "At present, I am with a gang of eight other M. I. T. fellows. Jim Nesmith, Joe Godfrey, Chetham, and some others are working now besides myself. Larry Codding, Gegger Dean and Ralph Weston are coming later, as I understand it. I have been put in distribution and at present am operating a substation." Then he continues about generators, kilovolt-amperes, and other such things — whatever they may mean. I often wondered the past couple years what they were intended to mean.

Ev was right about Larry Codding. Larry stopped in the office just before leaving for New Jersey. He reported a pleasant vacation on the Cape and thought he would be located in Essex in the future.

Phil Alden seems to be our long distance traveler. A card was received from him to the effect that he and Ted Wray were seeing England from a bicycle.

The announcement has been received of the marriage of Marie Scott and Russ Hubbard. Russ has the best wishes of the course in being the first one to take the big leap. When not busy with domestic duties, Russ has been seen at the Ginter Restaurants, first as Assistant Manager at the Seville and more recently as Manager of the Ambassador in Boston.

From Howard Spooner:

"From the wilds of Jersey to cultured Boston, greetings! Having read one copy of the Review, received one subscription blank from the Voo Doo, and having hopes of a check from the Coop, I am reminded of the exhortations of the w. k. gensec—'Write your course secretary!'

Name: Howard M. Spooner
Course: VI
Job: Yes
With: Public Service Production Company

which is the construction company of the Public Service Corporation of New Jersey. I am in the electrical end, working with a construction gang. While hanging out of the window of a power house between jobs one sunny day, I was surprised to see Ev Vilett heading for the plant. He had been spending the previous few days perambulating the streets of Perth Amboy counting the poles — the wooden kind. Before that, he had been operating at various stations.

"Did you know that the Western Electric Company was so fortunate as to have in its employ among others E. L. Norton, C. L. Weis and Carl Braestrup? The Duke de Braestrup is from latest reports living up on the drive, while as a proof of what queer things may happen, the other two fellows have teamed together and have rooms down on 72nd Street . Going to New York a while back for a mere evening's entertainment, I found the Maine guy at home and "the little stiff from Lacrosse" painting Greenwich Village red. On the way home, I ran into a fellow who said he was P. S. Murdoch but, knowing his old form in Boston, I had a hard time reconciling the plump cheeks with that fellow from the Stute who was so thin and tired from his hard studying.

"That's all the dope that I know to send along, so will watch for the next number of the Review to hear all about it. Best luck."

Why can not one of the gang with the Western Electric write in and check this report of Spooner?

Dewey Godard is taking the Graduate Student Engineering Course of the General Electric Company at Lynn and can be reached at 10 Henry Avenue, Lynn, Mass. He said that there are six other fellows from the course with him, but neglected to give their names. Haven't heard from them, so somebody had better flip the coin and write in for the crew.

1922 Continued

The United Electric Light and Power Company of 130 East 15th Street is fortunate in having Tommy Thomas in their engineering department. Tommy writes as follows:

"The work is very interesting, their being no routine work, and each investigation brings forth something new. A few weeks ago the chief called me in and said he had arranged to give me a five weeks' vacation. It turned out to be a tour of the system. I have already put in one week at Sherman Creek Station, another at the Hell Gate Station, a third at substations and this week I am around with the Underground Cable Department."

It is rumored that Joe Cook and Blondy Blomquist are at the Hawthorne plant of the Western Electric Company. Is this right, Joe and Blondy?—Herc Langdon's address is Hotel Mitchell, Port Jervis, N. Y., until further notice, according to a card. Have heard indirectly that Bill Lang is in the insurance game. Why not directly, Bill? Full Webster is with the General Radio Company in Cambridge. Full has been eating radio alive. Dan Coogan is breaking up stone. No, it's not as bad as it sounds, he is in the quarry business.

Somebody said that Reed Dallye was with the New York Telephone Company.

Parke Appel, Tommy Williams and myself are with the New England Telephone and Telegraph Company. The first three months we spent in taking a training course, which included a short period of study in all the departments. Part of this time was assigned to exchanges outside of Boston division. We were fortunate in obtaining assignments in the Western part of the State during the warm months. Greenfield, North Adams and Northampton were our respective seats of study for a month. It might be unwise for me to speak of these periods in too much detail. However, Tommy has become quite a tennis player and Parke is seeking some way to reduce.

After the course was over, Parke was pledged outside engineering department, Tommy pledged exchange fundamental plans, and myself toll engineering.

Guess this seems to be all for the present. Let your motto be: "Write to my course secretary and see that my neighbor does likewise."

We next come to Courses VIII and IX. Here is a tale of buck-passing. Tom Gill disingenuously failed to write any notes for Courses VIII and IX and plugged the gap by writing furiously to apparently all the members of these two courses and requesting them to write to us. It was a dirty trick, but it brought forth two pleasant results. The first of these is a letter from Phyl Krafft, which we take infinite pleasure in reprinting in full:

"A few days ago, I received a letter from Tom Gill, asking me to write to you, — why, I don't know, for in these days of murder and scandal my quiet, uneventful and cloistered life cannot possibly divulge anything of either interest or importance.

"Shortly after graduation I interred myself in the middle of Vermont, and for nine weeks I attempted to make devotees of Thespis out of young Dianas — at least, to the extent of making them learn parts. I returned from my sojourn of early-to-bed-and-early-to-rise with a lot of extra pep and pounds, both of which I proceeded to dispose of by an eager persual of nothing at all. Then I got a job, and I desire to state that next to Tech, the most wonderful thing that ever happened to me was the opportunity of working in a fascinating line of business with a wonderful firm. I am so crazy about the place that I can hardly wait when I close my desk for the time to come when I can open it again. When I announce that I am on the job fifteen minutes early almost every day, those who know my propensities will appreciate that I mean what I say. The work is advertising. From my office window I can see all of Boston and vicinity, with Tech looming large in the foreground, — and if ever you should feel like seeing a gorgeous sunset, come up and I will show you some of the best specimens ever.

"Although I am officially of Course IX, I am Course XV by adoption, so may I be considered alumnically as of Course XV?"

It was very kind of Phyl to invite us up to see the sunset sometime. We should very much like to see it. Unfortunately, the precise vantage point is not specifically mentioned in the letter. This is a bit unkind, but the gensec, for obvious reasons, is thoroughly accustomed to such treatment.

The second answer to Tom's underhanded appeal comes from 240 Oriental Place, Lyndhurst, N. J. It is from Les Price. It is as follows:

"I have a note here from Tom Gill asking me to drop you a line about what, where and how I am, for the Review, so here goes. I am an Assistant Electrical Engineer for the Underwriters' Laboratories of the National Board of Fire Underwriters. The New York Office and Laboratory is the principal electrical testing laboratory of the firm. The work consists fundamentally of testing and reporting on new electrical devices of all sizes, shapes and descriptions, with particular note of the fire and accident hazard involved in the use of the device or material. The Laboratory is located at 25 City Hall Place, New York City.

"I have organized another Jazz Band down here and we are coming along fine. Give my best to everybody."

Tom Gill's methods are certainly those of open diplomacy. "I have used *Technique* addresses and asked all Course VIII men to write directly to you this time," said he. The page swam before our gaze. After a little while, we felt better and were able to sit up and read on. The rest of the letter went as follows:

"I have heard from Dandrow and Downey. George Dandrow is with the Johns-Manville Co. in Boston. He was recently in New York, when he placed second in the hammer throw in the National A. A. Meet at Newark. Downey is with the U. S. Geodetic Survey and at present is somewhere in the Pacific Ocean. He was about New York Harbor all this summer.

"Between school and work, things are sure busy. With best wishes."

The gensec feels that Courses VIII and IX have been rather slighted as the combined result of their own lethargy, Tom's duplicity and the gensec's regrettable lack of acquaintance with the personnel of these valuable courses, but he sees no help for it.

Course XIII

C. Ford Blanchard, *Secretary*

1040 Plymouth St., Abington, Mass.

The Course Secretary for XIII has accumulated bits of information of some of the members of his course which ought to be published for the benefit of the whole. The Secretary's sources of information are not all as direct as should be, owing to the fact that he has not had the opportunity of writing to his classmates, a rather decrepit automobile having commanded all his spare time this summer. However, he is passing up his present job in Hudson and expects to be cursed with considerable time in the next few weeks when he can do lots of writing.

Alan Bowers, Billy Huger and Kenneth Bernard are with the Blake and Knowles Works right near the Stute. These last two have just started in there, but Al has been with them all summer. Scouts have reported that one Gahnkin was seen in the vicinity of said works recently. He is not to be identified with the Naval Archs, please.

Peggie reports that Tony Matarese, Gob Marsh and George Maling are on the pay roll at Fore River, and that the early rising has begun to pall on Tony. — Donald Warner, Chas. Chase and Joe Keenan are with the General Electric Works. Truly being at Lynn and Joe and Chas. at Schenectady. Ward Shearer is reported as working for the Steel Ore Co., stationed in New York.—The biggest wonder of the summer is the letter your secretary had from Dizzy, otherwise W. L. Newhall. He has spent the summer on the motor yacht Dolphin, and admits that he has gone wild. To quote, he can now "swear like the devil, drink and chase women." He expects to winter with the designer of said yacht.

The Secretary of the course requests to be addressed at No. 1040 Plymouth Street, Abington, Mass., until further notice.

Course XIV

Wallace L. Howe, *Secretary*

24 Irving St., Watertown, Mass.

The notes that I have succeeded in gathering, concerning the progress of the men in Course XIV, are few, very few in fact. Never mind explanations, summer evenings and all that stuff, the dope is write, and write often. Here goes for the first reel.

Windy Powell has returned to the Stute to take advanced work in electrochem. He tells us he needs a hot air furnace for research. We grant you the "Hot Air," Windy, but why the furnace? Harold Stanley is also seeking a higher degree under the tutelage of Pop Goodwin. It is rumored that Harold does most of his research work in the Walker Lounge among the Bridge hounds. Jimmy Sarros is still reporting for Boston Newspapers. In addition, he is taking master's work in the electrical department. Jimmy's side kick, Joe Cosgrove, kicked over the traces and was married the day after commencement, and is now employed by the Western Electric Co. in Chicago, at the Hawthorne Works. Joe always was pretty good at paddling his own canoe. Vernon Whitman has returned to the Stute in quest of a doctor's degree, and has taken a lab assistant's job under M. deK. We hear that Whit let the induction furnace freeze in his first lab period, and —well, "A nice time was had by all."

A. F. Robertson is a member of a survey party, surveying odd claims, mostly copper, in the Manatoba district, Canada. The party travels mostly by portage and canoe, and we surmise that Roby, as chainman, doesn't do much looking on. No, he doesn't exclaim wildly over the Bannock and Muligan of Duck diet, but then you must bear in mind that Roby has been accustomed to dining in Walker. He mentions perborates and says he will return to the institute at the beginning of the second term of the present school year to finish up. "Hey, look at this jelly."

We hear that Whitney and his research associates are much disturbed about their garlands, since Max Ulbrich and Kendall Paige, the equilibrium box twins, entered the General Electric at Lynn. For efficiency's sake, it would be well to place Max at one end of the lab and Paige at the other. They might get along then.—Ed Gruppe is carving a big future for himself at the Rochester Gas and Electric. Ed being a modest chap doesn't admit it but he writes an interesting letter telling of the central station work he has been engaged in. No, not yet, fellows, but don't be surprised if you hear he has turned benedict.—Fletcher, poor soul, went X-A. Tell us about it, Fletch.

A. L. M. Dingee was married in September to Miss Wedge of Philly. Their present address is 10 Remington Street, Cambridge, Mass. Ding at present is seeking a doctor's degree in electrochemistry and is also an assistant in the Physics Department. But, Ding, why — (but then it would be too stereotyped to make a nasty leer at our Physics Department).—It is rumored that Mr. Ole I. Vold has accepted a position with an electrochemical corporation in South America and has taken his "Hot Dawg" machine with him.—In the July issue of the Review, our most high gensec reported that Phil Caplain had accepted a position with an electrochemical corporation. Head-

Professional Cards

A Directory of Technology Graduates and Other Qualified Engineers

1922 Continued

quarters New York City. How about it, Phil. The last we heard, it was Hats. Kearful is finishing up his course at the Institute.—G. E. Dean has taken a position with The Public Service Corporation of New Jersey. He boasts that he is acting as wet and dry nurse for watt-hour meters.

Some have been urged in the foregoing notes to write. All are urged in the few following lines to do likewise.

Snap out of it, you electrochemists and research hounds. I know you birds don't envy me my job of collecting personal data from the gang. I realize that it is a thankless job, but since fate has so decreed, won't you help a fellow out and WRITE.

It's a job to make whole cloth out of short threads. Fortunately, however, we electrochemical engineers are too prominent in this small world to be entirely lost or free from scandal. Some have been good enough to write nice long interesting epistles, but unless more do so, the columns set aside for XIV news will be filled with great gobs of nothing. It all rests with you. I can make some personal comments and sling some bull up to a certain maximum point, but what I want and what I am going to get from you (even if I must be offensive) is personal information.

Lastly, do not forget the Round Robin set for the month of December; the earlier you get it in the better.

* * *

The gensec interposes a word at the last. Notes from Courses I, IV, V, VII, X, XI and XV will be due within a week after these words see the light. The class organization is coming along and men of the several courses will be in closer touch with their Course Secretaries as a result. But — we address the multitude — please don't wait to hear from the Course Secretary before you write him. We want to hear as much, from every man, as possible and from as many men as possible, too.

An end for this month. We are sorry that there appears no evidence that we are doing any work on these notes ourself—particularly sorry because there is a beautiful amanuensis who, discovering her five hours of overtime work set at naught, will never speak to us again.

Classified Advertising

Mail may be addressed to a Box Number in care of this magazine and will be promptly forwarded to the Advertiser. Other than this, the Review assumes no obligation. Such address counts as five words. Copy for insertion in this section must reach the Review by the 15th of the month, the magazine being on sale the 25th.

RATES–Positions Vacant: No display, 4 cents per word, minimum charge $1.00, payable in advance.
Positions Wanted: No display, 2 cents per word, minimum charge $0.50, payable in advance.

Display advertising charged at regular advertising rates, which will be furnished on application.

Positions Vacant

ARCHITECT with from five to ten years' experience, including outside superintending work, is wanted by a large engineering corporation. The proper man should be interested in industrial architecture and must be capable of taking complete charge of the architectural design of such buildings. Should be of good personality and able to work with engineers without friction. Address TECHNOLOGY REVIEW, Box 1011.

A JUNIOR metallurgical engineer wanted to act as sample foreman in mill located in Chile. Man must be single and willing to sign up on a three-year contract basis. Address TECHNOLOGY REVIEW, Box 1016.

FIRM of manufacturers are looking for a reliable salesman to handle pumping machinery in central New York territory. A man between the ages of 24 and 35 would be preferable, but it is essential that he be willing to stay on the job for at least two or three years, provided, of course, that his income is satisfactory. Address TECHNOLOGY REVIEW, Box 1013.

IMMEDIATE opening for engineer capable of doing some editorial work for Marine Review. Some practical experience at sea, in shipyards, or preferably in office of well organized ship operating company desirable. Should have had at least five years practical experience. Experience as technical journalist desirable but not necessary. Ability to write, absolutely essential. Must be familiar with American shipping. Application by letter. Address TECHNOLOGY REVIEW, Box 1004.

LARGE and long established food products manufacturing corporation in Middle West is looking for an Assistant Factory Superintendent. A rather exceptional man is desired, with a forceful and attractive personality and a record for ability, previous business experience and adaptability. Salary will be determined by qualifications of candidate. Address TECHNOLOGY REVIEW Box 1010.

MANUFACTURER of heating apparatus wants mechanical engineer with few years' experience for position of superintendent. Factory includes foundry, machine shop and assembling plant and candidate should have had some experience in each of these lines. Address TECHNOLOGY REVIEW, Box 1012.

WANTED: Several salesmen and agents for company manufacturing automobile accessories. Quality of goods exceptionally fine. Wish to build up sales organization of high calibre. Replies will be held strictly confidential. Address TECHNOLOGY REVIEW, Box 1001.

WANTED: By manufacturer of automobiles a young man with a good technical education, preferably one who has had automobile mechanical experience, for work in the Technical Department, which department has charge of all correspondence with distributors, dealers and owners with respect to the mechanical construction of the automobiles and also has supervision of the replaced parts business. Address TECHNOLOGY REVIEW, Box 1002.

WANTED: A man thirty to forty years of age who has had practical paper mill experience — one who is conversant with the different qualities of paper. Should have a pleasing personality and be capable of meeting and conversing easily with people visiting the plant. An executive position in the Purchasing Department. Salary depends upon qualifications of the man. Address TECHNOLOGY REVIEW, Box 1003.

WANTED: A Physicist, preferably one who has had chemistry through quantitative analysis, for research work along the lines of heat insulation and filtration of liquids. Personality is a considerable factor, as the position would be permanent for a young, alert physicist of proper qualifications. Location is California. Salary to depend upon the qualifications of the applicant. Replies will be held strictly confidential. Address: TECHNOLOGY REVIEW, Box 1000.

WANTED by a large paper manufacturing company, chemist for research department. Either a man who has had appreciable research experience on paper or pulp, or a recent graduate with B.S. degree in Chemical Engineering, followed by Ph.D. in Chemistry, would be considered. Location eastern Canada. Address TECHNOLOGY REVIEW, Box 1009.

Positions Wanted

AFTER thirty years of executive experience and as a consultant in responsible charge of engineering, design and construction work, including plans, specifications, estimates, the purchase of materials and equipment (both service and operating), and cost keeping, I am seeking a "job" large enough in its possibilities for me to locate in it permanently. My whole record can be placed at the inspection of any interested party. Address: TECHNOLOGY REVIEW, Box 2002.

GRADUATE, Class of 1919, chemical engineering, experience in laboratory and zinc oxide manufacture and development, open to change of position. Address TECHNOLOGY REVIEW, Box 2011.

GRADUATE with 15 years' experience, qualifying for position as executive mechanical and electrical engineer or as assistant manager of manufacturing plant, desires position in or near Providence, R. I. Salary desired $4000. Address TECHNOLOGY REVIEW, Box 2014.

INSTITUTE graduate in Mechanical Engineering, thirty years old, wants a position connected with works or sales management. Has had seven years' experience in organization and management, engineering, selling. Can handle men. Willing to start modestly where there is an opportunity to work into an executive position of permanence and responsibility. Address TECHNOLOGY REVIEW, Box 2010.

MACHINE DESIGNER who can be valuable to a manufacturer who wants to improve his machines or processes, or to a shop that wants a machine or device to manufacture, is seeking a position. Has clear and correct knowledge of the invention, design and mechanism of intricate instruments. Also can give good service in the manufacture of tires through invention, as have many years experience in that line. Address TECHNOLOGY REVIEW, Box 2001.

MAN exceptionally well trained in modern production methods, and with five years' experience in managerial lines, wishes position as manager of plant that desires to better its production, reduce its costs and to generally increase its efficiency. Further qualifications will be furnished interested parties. Address: TECHNOLOGY REVIEW, Box 2003.

MINING Engineer: Twelve years general mining experience in North and South America with gold, silver, lead, zinc and copper producing companies. Five years as engineering assistant to management of large copper company. Position as assistant to consulting engineer or manager preferred. Speaks Spanish. Address TECHNOLOGY REVIEW, Box 2005.

SALESMAN: Graduate with S.B. in Electrical Engineering 1921, as of 1918, dislikes engineering and wants to change to sales work, which will lead to a responsible business executive position. Has had no sales experience but believes he possesses the fundamental qualities necessary to make a good salesman by proper training and study; namely, honesty, sincerity and a willingness to work hard. Aged 27. Single. Qualifications and best of references on request. Address: TECHNOLOGY REVIEW, Box 2012.

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